Teacher's Guide

Bank Street School Filer Workshop Manual

Apple
Commodore 64

SUNBURST
COMMUNICATIONS

BANK STREET SCHOOL FILER
WORKSHOP MANUAL

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Programmed by: Charles L. Olson, Jr.

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BEFORE THE WORKSHOP

Know Your Audience

You may already know the participants' backgrounds: what subjects and grades they teach, what types of students are in their classes, how much they know about computers and tool software, and how knowledgeable they are about databases. If not, distribute the survey PRE-WORKSHOP A: BANK STREET SCHOOL FILER WORKSHOP SURVEY (in the handout section). Collect it well in advance of the workshop and analyze it to learn about your audience.

Check the Room and Equipment

Try to prevent unpleasant surprises. Whenever possible, check the layout of the room and make sure all equipment is working. If not, plan how you will handle equipment problems *before* participants arrive.

No later than a day before, check the computer classroom for:

computer equipment and software working
computers have adequate memory (64 or 128K for Apple, 64K for C-64)
computer hooked up to large monitor (with printer if possible)
VCR working, with a screen that all can see
adequate light and ventilation
adequate outlets
extension cords, if needed
overhead projector working

If you plan to offer refreshments, make sure you have cups, spoons, plates, napkins, beverages, and snacks.

Try the *Bank Street School Filer* on the computer to be used for demonstrations. Make sure the screen on the large monitor can be seen clearly. You will probably want to use the 40 column display. For Apple users, we recommend using the 128K Program Disk so you will not have to return to the disk when ordering reports.

Prepare Your Materials

On the next page, we have listed materials and equipment which contribute to the workshop. To ensure a trouble-free workshop, you must have all the materials (software, video, handouts, paper, and pens) collected and organized at least a day in advance.

A Note About Computer Versions

This manual gives instructions for either Apple or Commodore. Commodore instructions, when they differ, appear in parentheses in the text of the activities. However, in transparencies or handouts we have created two separate pages when needed—one for Apple and one for Commodore—in order to avoid confusion. When you are preparing your materials, be sure that you are using the correct version for your computer equipment. Also, you may find it difficult to have different brands of computers in any one workshop.

MATERIALS AND EQUIPMENT CHECKLIST

No later than the day before the workshop you should collect and organize the materials. Check this list as you review materials you will need:

___ *Bank Street School Filer Workshop Handbook*

___ Handouts: (Generally 1 per participant. See activities for specifics.)
- ___ PRE-WORKSHOP A: BANK STREET SCHOOL FILER WORKSHOP SURVEY
- ___ INTRODUCTIONS A: AGENDA
- ___ DATABASE A: ASSIGNMENT
- ___ PREPARE A: UNITED STATES DENSITY MAP
- ___ PREPARE B: SUNBURST DATABASES AND SCHOOL FILER SAMPLE FILES
- ___ PREPARE C: QUICK START CARD (Apple and Commodore version)
- ___ CREATE A: DATABASE PLANNING SHEET
- ___ CREATE B: DATABASE PROJECT CHECKLIST
- ___ CREATE C: GUIDE SHEET
- ___ CONCLUSIONS A: SUGGESTED READING LIST
- ___ CONCLUSIONS B: RESOURCES
- ___ CONCLUSIONS C: BANK STREET WORKSHOP EVALUATION

___ Transparencies:
- ___ LOG-IN #1: ENTERING YOUR CLASS RECORD (Apple and Commodore version)
- ___ INTRODUCTIONS #1: WORKSHOP GOALS
- ___ INTRODUCTIONS #2: AGENDA
- ___ DATABASE #1: WHAT IS A DATABASE?
- ___ DATABASE #2: COMPONENTS OF A DATABASE
- ___ DATABASE #3: CREATING A NEW FIELD
- ___ DATABASE #4: BROWSING (Apple and Commodore version)
- ___ DATABASE #5: FINDING
- ___ DATABASE #6: SORTING (Apple and Commodore version)
- ___ DATABASE #7: SUMMARY OF BASIC OPERATIONS (Apple and Commodore version)
- ___ PREPARE #1: REGION ABBREVIATIONS
- ___ PREPARE #2: CREATING A COMPUTED FIELD
- ___ PREPARE #3: DENSITY OF STATES BY REGION
- ___ PREPARE #4: THE COMMENT FIELD (Apple and Commodore version)
- ___ PREPARE #5: THINKING SKILLS
- ___ REPOPT #1: REPORTS OVERVIEW
- ___ REPORT #2: QUICK TABLE REPORT
- ___ REPORT #3: QUICK LIST REPORT
- ___ REPORT #4: QUICK SCREEN REPORT
- ___ REPORT #5: QUICK BLANK FORM
- ___ REPORT #6: PRINTING A QUICK LIST REPORT (Apple and Commodore version)
- ___ REPORT #7: CUSTOM TABLE REPORT
- ___ REPORT #8: CUSTOM PAGE REPORT
- ___ REPORT #9: CUSTOM TEXT REPORT
- ___ REPORT #10: REPORT PLANNING SHEET
- ___ REPORT #11: PRINTING A CUSTOM TABLE REPORT
- ___ REPORT #12: FORMAT RANGES
- ___ CREATE #1: DATABASE IDEAS
- ___ CREATE #2: CRITERIA IN SELECTING A TOPIC
- ___ CREATE #3: DATABASE PLANNING SHEET
- ___ CREATE # 4: SUMMARY
- ___ CLASSROOM #1: UTILITY PROGRAM (Apple and Commodore version)
- ___ CLASSROOM #2: CLASSROOM TOOLS DISK (Apple and Commodore version)
- ___ CONCLUSIONS #1: SUMMARY

___ Sunburst Video: *Using Databases in the Classroom*

___ Equipment:

- ___ One computer hooked up to large monitor for demonstrations (with a printer attached if possible)
- ___ One computer set up for LOG-IN activity
- ___ Computers (one per every two participants)
- ___ VCR hooked up to large monitor
- ___ Overhead projector, extra bulb, marking pen
- ___ Materials with which to record participants' suggestions:
  - ___ chalk and a chalkboard, or
  - ___ a standing easel with paper and markers, or
  - ___ dry erase markers and whiteboard.
- ___ Name tags
- ___ United States Density Map (prepared according to directions in *USING PREPARED DATABASES*)
- ___ Colored pencils for preparing Density Map
- ___ Large envelope for collecting evaluations
- ___ Paper for participants to make notes
- ___ Extra pens and pencils for participants

___ Software: (You may want to make additional copies of some of the databases.)

- ___ Presenter's Data Disk with CLASS, WORLD, DEMO and STUDENTS Databases
- ___ *Bank Street School Filer* (64 or 128K Apple or Commodore version, depending on computer equipment), including:
  - ___ Teacher's Guide
  - ___ Reference Manual
  - ___ 2 *School Filer* Program Disks
  - ___ *Tutorial Disk*
  - ___ *Classroom Tools Disk*
  - ___ School Database Disk
- ___ Assortment of Databases (Teacher's Guides and Disks)
  - ___ *Animal Life* *
  - ___ *Astronomy**
  - ___ *Climate and Weather*
  - ___ *Endangered Species*
  - ___ *North America**
  - ___ *Our Town*
  - ___ *Space*
  - ___ *United States*
- ___ set of initialized data disks (preferably one per participant) with the WORLD file on each. You may also want to copy the files DEMO and STUDENTS from Presenter's Data Disk onto each data disk.
- ___ 2 additional initialized disks
- ___ Report Saving Disk (prepare as outlined in *Classroom Considerations,* p. 54)

**Apple and Commodore versions come in separate packages; be sure you have the correct version.*

AGENDA

9:00 LOG-IN
Enter a record in a CLASS database as you arrive.

9:15 INTRODUCTIONS
Introduce presenter, participants and workshop objectives.

9:30 WHAT IS A DATABASE?
Demo: Discuss what a database is, its importance, and its components. Learn basic database operations of **BROWSE**, **FIND** and **SORT** using CLASS file.

Lab: Practice **FIND** and **SORT**.

10:30 BREAK

10:45 USING PREPARED DATABASES
Demo: Learn how to use prepared databases in the curriculum to develop inquiry skills.

Lab: Try out databases prepared for use with the *School Filer*.

12:00 PRINTING REPORTS
Learn how to order reports.

12:30 VIDEOTAPE
View and discuss teacher-training videotape.

1:00 LUNCH

1:45 CREATING YOUR OWN DATABASE
Demo: Learn how to plan and create a database.

Lab: Work in small groups to create your own database.

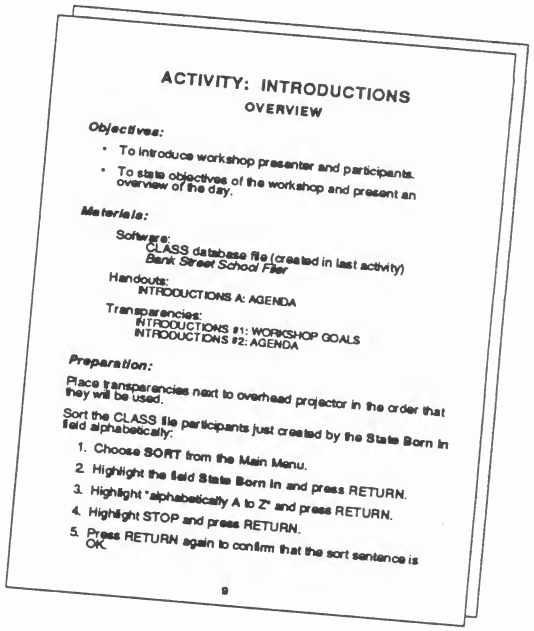
3:25 CLASSROOM CONSIDERATIONS
Learn and discuss classroom management techniques.

3:50 CONCLUSIONS
Discuss reasons to use databases, give participants additional sources, and have them fill out evaluation.

ABOUT THE ACTIVITIES

There are 8 activities in this guide, one for each point in the agenda on the previous page. Each activity has the following sections:

Overview—States the objectives and lists the materials needed for that activity.



ACTIVITY: INTRODUCTIONS

OVERVIEW

Objectives:

- To introduce workshop presenter and participants.
- To state objectives of the workshop and present an overview of the day.

Materials:

Software:
CLASS database file (created in last activity)
Bank Street School Filer

Handouts:
INTRODUCTIONS A: AGENDA

Transparencies:
INTRODUCTIONS #1: WORKSHOP GOALS
INTRODUCTIONS #2: AGENDA

Preparation:

Place transparencies next to overhead projector in the order that they will be used.

Sort the CLASS file participants just created by the State Born in field alphabetically:

1. Choose SORT from the Main Menu.
2. Highlight the field State Born in and press RETURN.
3. Highlight "alphabetically A to Z" and press RETURN.
4. Highlight STOP and press RETURN.
5. Press RETURN again to confirm that the sort sentence is OK.

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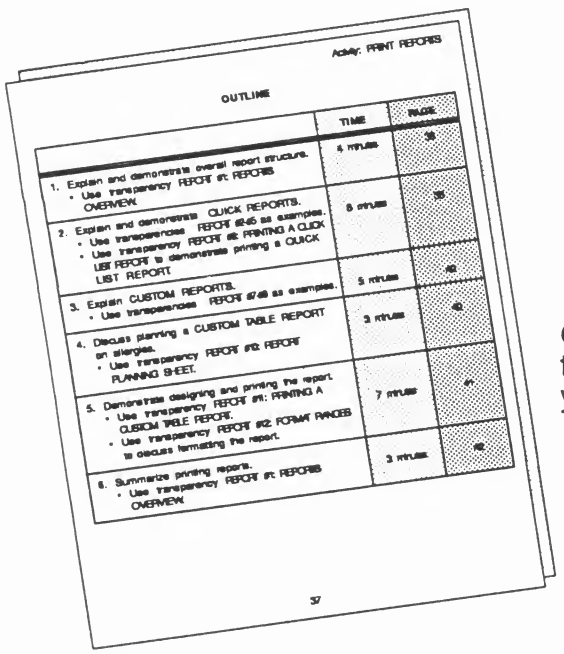

Activity: PRINT REPORTS

OUTLINE

	TIME	PAGE
1. Explain and demonstrate overall report structure. • Use transparency REPORT #1: REPORTS OVERVIEW.	5 minutes	38
2. Explain and demonstrate QUICK REPORTS. • Use transparencies REPORT #2-#5 as examples. • Use transparency REPORT #6: PRINTING A QUICK LIST REPORT to demonstrate printing a QUICK LIST REPORT.	8 minutes	39
3. Explain CUSTOM REPORTS. • Use transparencies REPORT #7-#9 as examples.	5 minutes	40
4. Discuss planning a CUSTOM TABLE REPORT on allergies. • Use transparency REPORT #10: REPORT PLANNING SHEET.	3 minutes	40
5. Demonstrate designing and printing the report. • Use transparency REPORT #11: PRINTING A CUSTOM TABLE REPORT. • Use transparency REPORT #12: FORMAT RANGES to discuss formatting the report.	7 minutes	41
6. Summarize printing reports. • Use transparency REPORT #1: REPORTS OVERVIEW.	3 minutes	42

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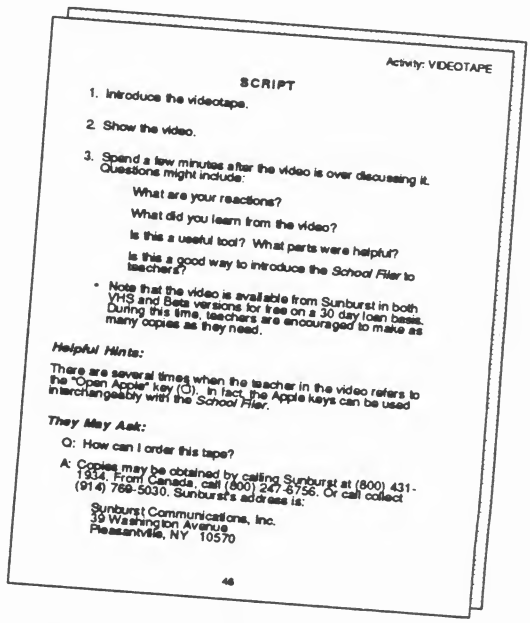
Outline—Gives an outline of activity, time needed, and page numbers that you can turn to for the script.

Script—Presents activities, suggested commentary, and gives Helpful Hints to support the activities. Some activities also have a "They May Ask" section, that lists frequently asked questions and how to answer them.



Activity: VIDEOTAPE

SCRIPT

1. Introduce the videotape.
2. Show the video.
3. Spend a few minutes after the video is over discussing it. Questions might include:

   What are your reactions?

   What did you learn from the video?

   Is this a useful tool? What parts were helpful?

   Is this a good way to introduce the *School Filer* to teachers?

   - Note that the video is available from Sunburst in both VHS and Beta versions for free on a 30 day loan basis. During this time, teachers are encouraged to make as many copies as they need.

Helpful Hints:

There are several times when the teacher in the video refers to the "Open Apple" key (O). In fact, the Apple keys can be used interchangeably with the *School Filer*.

They May Ask:

Q: How can I order this tape?

A: Copies may be obtained by calling Sunburst at (800) 431-1934. From Canada, call (800) 247-6756. Or call collect (914) 769-5030. Sunburst's address is:

Sunburst Communications, Inc.
39 Washington Avenue
Pleasantville, NY 10570

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Take a few minutes to learn about the organization, so that you can take advantage of the special features provided to make your job easier.

ACTIVITY: LOG-IN

OVERVIEW

Objectives:

- To give each person an opportunity to use the *Bank Street School Filer* immediately upon entering the class.

- To create a database that is meaningful to the participants (to use later).

Materials:

Software:

CLASS database file, from Presenter's Data Disk (see *Preparation* below)
Bank Street School Filer

Transparencies:

LOG-IN #1: ENTERING YOUR CLASS RECORD*

Supplies:

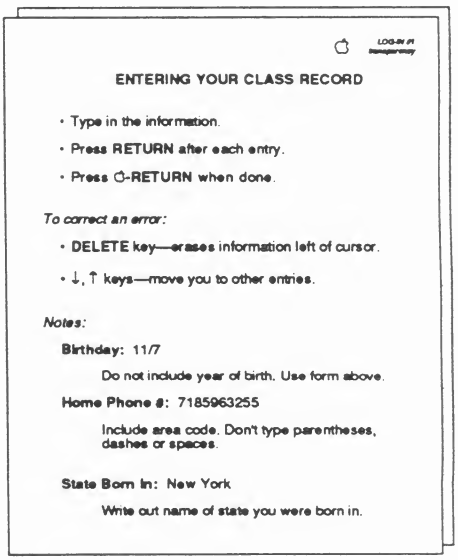
name tags
felt-tip markers

Preparation:

1. You'll be using the CLASS database form (on Presenter's Data Disk) for participants to fill in as they enter the classroom. Each record will describe one of the participants. The fields in each record have a variety of data types:

(ANYTHING)	**First Name:** Jane	(PHONE)	**Home Phone #:** (718) 596-5432
(ANYTHING)	**Last:** Bedford	(NUMBER)	**Years Computing:** 4
(DATE)	**Birthday:** March 8	(ANYTHING)	**State Born In:** Wyoming

2. You can tailor the file to what you know about the participants. For example, instead of asking for the number of years of computing experience (**Years Computing**), you might ask for number of years of teaching experience (**Years Teaching**), number of years in a particular school or school system (**Years at Groton**), or youngest grade the person currently teaches (**Youngest Grade**).



ENTERING YOUR CLASS RECORD

- Type in the information.
- Press RETURN after each entry.
- Press ⌘-RETURN when done.

To correct an error:

- DELETE key—erases information left of cursor.
- ↓, ↑ keys—move you to other entries.

Notes:

Birthday: 11/7
Do not include year of birth. Use form above.

Home Phone #: 7185963255
Include area code. Don't type parentheses, dashes or spaces.

State Born In: New York
Write out name of state you were born in.

3. Enter a record for yourself. (Follow steps on transparency LOG-IN #1.) Save the file using the name CLASS.

4. Place transparency LOG-IN #1 on the overhead.

5. Before the start of the workshop, boot the *School Filer* and load the file CLASS on a computer near the door where participants enter. Choose **ADD NEW RECORD**.

6. Boot the *School Filer* on all the other computers and turn off the monitors. This strategy will save you time later in the workshop.

* There are two versions, Apple or Commodore. Be sure you use the correct one.

OUTLINE

	TIME	PAGE
1. Teach participants how to enter a record in the CLASS file as they arrive. • Use transparency LOG-IN: ENTERING YOUR CLASS RECORD	may vary	8
2. Note specifics of entering information in: • **Birthday** field • **Phone** field • **Years Computing** field • **State Born In** field	intersperse during above	8
3. Save the file using the name CLASS.	1 minute	8

SCRIPT

1. Be prepared to start the workshop 10 minutes ahead of time. As the first participants arrive, teach them how to enter a record in the CLASS file.

   - If there are two presenters, one should be stationed at the computer, the other should greet the workshop participants and hand out name tags.

   - If there is one presenter, have the first person who enters a record teach the next person, and so on. This will enable you to greet the workshop participants while overseeing the entering of information. Note that participants may refer to transparency LOG-IN #1 on the overhead projector for additional help.

2. When teaching participants how to enter a record, note that:

   - the year of birth should not be included in the **Birthday** field. Encourage them to enter their birthday in the form 11/7 and note what happens when RETURN (⏎) is pressed. (It changes to "November 7").

   - the phone number, including area code, should be entered without parentheses or dashes. "7185963255" will change to "(718) 596-3255."

   - the **Years Computing** field (or whatever NUMBER field you include) will only take numbers.

   - for the **State Born In** field, participants should write out the name of the state they were born in, instead of using an abbreviation.

   - participants should be sure to press ♂-RETURN (♀-RETURN) when they are finished, in order to add their record and leave the program ready for the next participant.

3. After the last participant has entered a record, save the file using the name CLASS.

Helpful Hints:

If possible, have name tags prepared in advance and display them alphabetically. This will help you learn names and will quickly tell you whether all expected participants have arrived.

They May Ask:

Q: How do I correct a mistake?

A: The delete key will erase characters just to the left of the cursor. If you want to correct the whole entry, use the up or down arrow key to move to that entry and simply start typing the new information. This will automatically erase the old information. Remember to press RETURN (⏎) when you have finished.

ACTIVITY: INTRODUCTIONS

OVERVIEW

Objectives:

- To introduce workshop presenter and participants.
- To state objectives of the workshop and present an overview of the day.

Materials:

Software:
CLASS database file (created in last activity)
Bank Street School Filer

Handouts:
INTRODUCTIONS A: AGENDA

Transparencies:
INTRODUCTIONS #1: WORKSHOP GOALS
INTRODUCTIONS #2: AGENDA

Preparation:

Place transparencies next to overhead projector in the order that they will be used.

Sort the CLASS file participants just created by the **State Born In** field alphabetically:

1. Choose **SORT** from the Main Menu.
2. Highlight the field **State Born In** and press RETURN.
3. Highlight "alphabetically A to Z" and press RETURN.
4. Highlight STOP and press RETURN.
5. Press RETURN again to confirm that the sort sentence is OK.

OUTLINE

	TIME	PAGE
1. Introduce yourself.	1 minute	11
2. Have participants introduce themselves (in alphabetical order by state born in).	10 minutes (may vary)	11
3. Go over workshop goals. • Refer to transparency INTRODUCTIONS #1: WORKSHOP GOALS	2 minutes	11
4. Review agenda. • Refer to transparency INTRODUCTIONS #2: AGENDA and handout INTRODUCTIONS A: AGENDA	2 minutes	11

SCRIPT

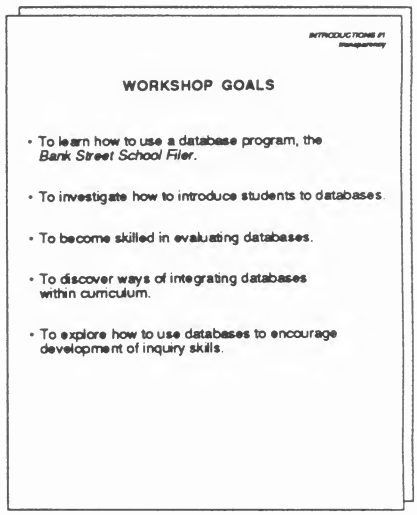
1. Introduce yourself. Tell something about your background and current position, including any teaching experience.

2. Have participants introduce themselves. Tell them that you will be calling their names in a specific order—in alphabetical order of the state each was born in. Explain that you are able to put their records in order this way by using a feature of the database called sorting, which they'll see more of later.

   Use the points below as a guide for the introductions (you may want to jot these points on the board).

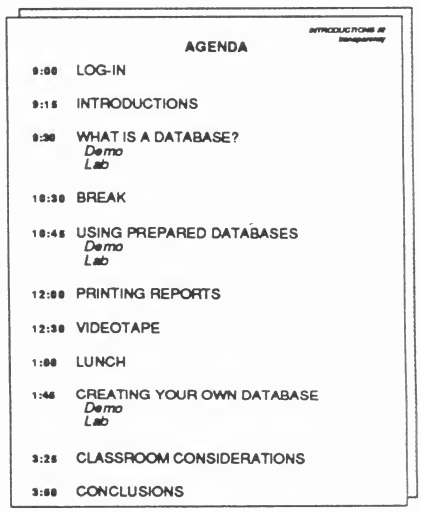
   Name
   School or School District
   Role
   Computer Experience
   Database Experience

3. Go over the workshop goals. Place transparency INTRODUCTIONS #1: WORKSHOP GOALS on the overhead projector and read each of the workshop goals to the group.


WORKSHOP GOALS

- To learn how to use a database program, the *Bank Street School Filer*.
- To investigate how to introduce students to databases.
- To become skilled in evaluating databases.
- To discover ways of integrating databases within curriculum.
- To explore how to use databases to encourage development of inquiry skills.

4. Review the agenda. Place INTRODUCTIONS #2: AGENDA on the overhead, and distribute copies of handout INTRODUCTIONS A: AGENDA.


AGENDA

9:00	LOG-IN
9:15	INTRODUCTIONS
9:30	WHAT IS A DATABASE? *Demo* *Lab*
10:30	BREAK
10:45	USING PREPARED DATABASES *Demo* *Lab*
12:00	PRINTING REPORTS
12:30	VIDEOTAPE
1:00	LUNCH
1:45	CREATING YOUR OWN DATABASE *Demo* *Lab*
3:25	CLASSROOM CONSIDERATIONS
3:50	CONCLUSIONS

Helpful Hints:

Try to identify participants who introduce themselves by saying they have little or no computer experience. Be prepared to assist them or group them with someone who has had more experience.

ACTIVITY: WHAT IS A DATABASE?

OVERVIEW

Objectives:

- To discuss the purpose of using databases in the classroom.
- To answer the question, "What is a database?"
- To introduce the basic database operations (**BROWSE**, **FIND**, **SORT**).
- To demonstrate how fields are created.

Materials:

Software:
CLASS database file (created in LOG-IN activity)
data disks with the WORLD database file (on Presenter's Data Disk—make enough for each group of 2-3; see *PREPARATION* below.)
Bank Street School Filer

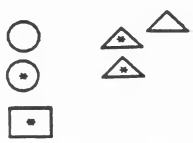
Handouts:
DATABASE A: ASSIGNMENT

Transparencies:
DATABASE #1: WHAT IS A DATABASE?
DATABASE #2: COMPONENTS OF A DATABASE
DATABASE #3: CREATING A NEW FIELD
DATABASE #4: BROWSING*
DATABASE #5: FINDING
DATABASE #6: SORTING*
DATABASE #7: SUMMARY OF BASIC OPERATIONS*

Supplies:
writing materials (such as felt-tip markers, dry erase markers, or chalk), preferably in three different colors

Preparation:

1. Draw the following setup for a VENN diagram in three locations on the board:



2. Make data disks containing the WORLD file (enough for each group of 2 or 3).
3. Make enough copies of DATABASE A: ASSIGNMENT for each group.
4. Boot the *Bank Street School Filer* on each computer.
5. Place transparencies next to the overhead in the order that they will be used.

* There are two versions, Apple or Commodore. Be sure you have the correct one.

OUTLINE

	TIME	PAGE
DEMO: 1. Discuss the need for databases.	1 minute	14
2. Define database; discuss components. • Use transparency DATABASE #1: WHAT IS A DATABASE? • Use transparency DATABASE #2: COMPONENTS OF A DATABASE.	4 minutes	14
3. Discuss parts of the CLASS database and demonstrate how to create a field. • **RETRIEVE** CLASS file. • Ask, What is a record? What is a field? • Discuss experiences in entering information. • Use transparency DATABASE #3: CREATING A NEW FIELD to demonstrate creating a field.	5 minutes	15
4. Demonstrate the basic operations (**BROWSE, SORT, FIND**). • Use transparency DATABASE #4: BROWSING. • Use transparency DATABASE #5: FINDING. • Use transparency DATABASE #6: SORTING.	10 minutes	16
5. Discuss concepts of **FIND** and **SORT** using: • VENN diagrams, participants' bodies	5 minutes	18
6. Summarize **BROWSE, FIND, SORT.** • Use transparency DATABASE #7: SUMMARY.	1 minute	19
LAB: 1. Introduce activity.	.5 minutes	20
2. Explain assignment and go over first question.	5 minutes	20
3. Divide participants into groups.	.5 minutes	20
4. Begin the assignment. • Let participants refer to transparency DATABASE #7: SUMMARY OF BASIC OPERATIONS.	25 minutes	20
5. Go over answers.	3 minutes	20

SCRIPT

DEMO:

1. Discuss the need for databases.

   "We live in an Information Society, where there is a constant influx of information to be absorbed.

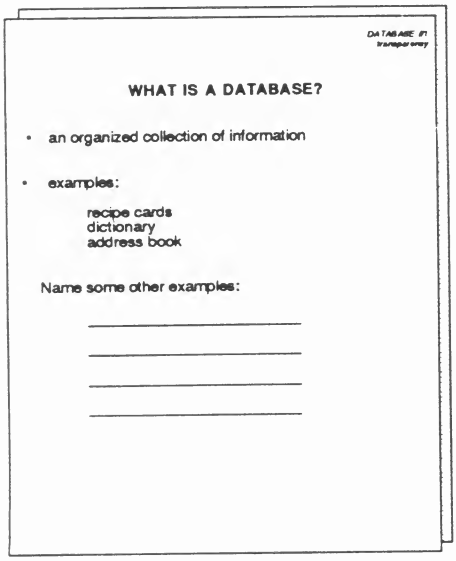
   "But information by itself is of no help—in fact, it can be a liability—unless we have the ability to organize, manage, and retrieve it at will.

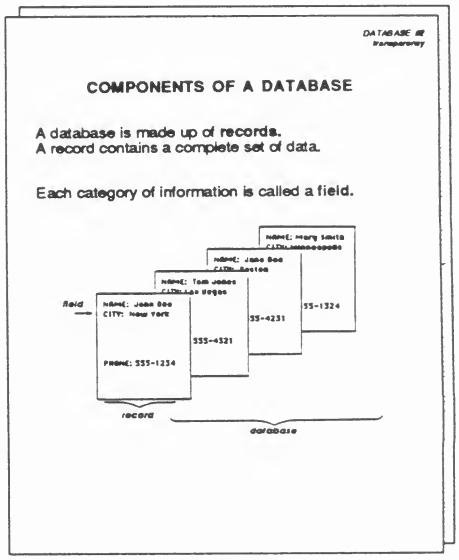
   "That is where databases come in, and why they are so crucial."

2. Define database, and discuss its components.

   - Use transparency DATABASE #1: WHAT IS A DATABASE?, and give examples. Ask participants for other examples. Stress that these are examples of *non-computerized* databases. Electronic databases use the power of the computer to help enter, edit, sort, find, and print information in a more flexible manner and more quickly than would be possible by hand. (This is particularly true for larger databases.)

   - Use transparency DATABASE #2: COMPONENTS OF A DATABASE. Give an example of a field and record in an address book.




COMPONENTS OF A DATABASE
A database is made up of records.
A record contains a complete set of data.
Each category of information is called a field.
field
record
database

3. Discuss the parts of the CLASS file.

   - Show participants how to **RETRIEVE** the CLASS file. Note that the *School Filer* is the database *program,* which lets you create databases and is used to boot the computer. The CLASS file is the actual *database,* which was saved on a data disk.

   - Ask participants what a record is in this database. **BROWSE** through the database to show them a few of the records. (To **BROWSE**, press ESC [↵] in the Main Menu, and press the ♘ (C) and an arrow key to move through the records.) "Here is one record, here is another."

   - Ask them what a field is in this database. Look at the fields in one record.

   - Discuss participants' experiences in entering information in the CLASS database. Ask participants what they remember about entering information in the **Birthday**, **Home Phone #**, and **Years Computing** fields.

     "What did you notice when you entered information in the **Birthday** field?" (Dates were converted to a consistent format; i.e., 11/06 became November 6.)

     "What about the **Home Phone** field?" (Phone numbers were converted to a consistent format—area code in parentheses, exchange followed by a dash.)

     "Did anyone try entering letters in the **Years Computing** field?" (Only numbers were accepted.)

     "That's because I specified the type of information to go in each of the fields when I created the database."

   - Point out the frequently used keys on the Apple (Commodore): ESC, RETURN, TAB, ♘ (↵, RETURN, < or >, C). Note that pressing ♘-? (C-?) will give you a list of commands.

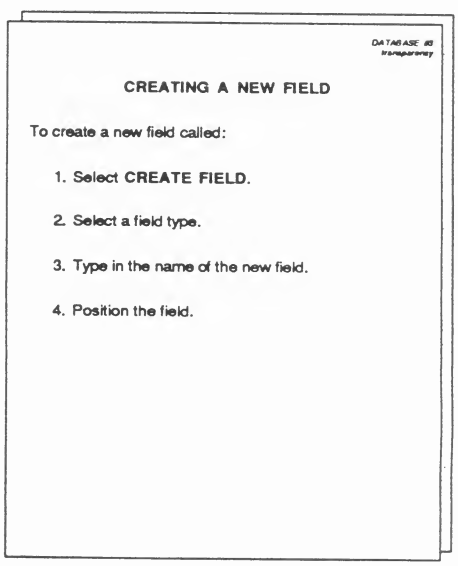
   - Demonstrate creating a new field, **Salary**.

     "How did I create the database? I just defined the fields and put them where I wanted them on the screen. For example, let's add a new field, **Salary**."

     a. Follow the steps on transparency DATABASE #3: CREATING A NEW FIELD.

     b. Enter an outrageously high salary in one of the records.

     c. Note that the money sign, commas, and decimals are added automatically.


DATABASE #3
transparency

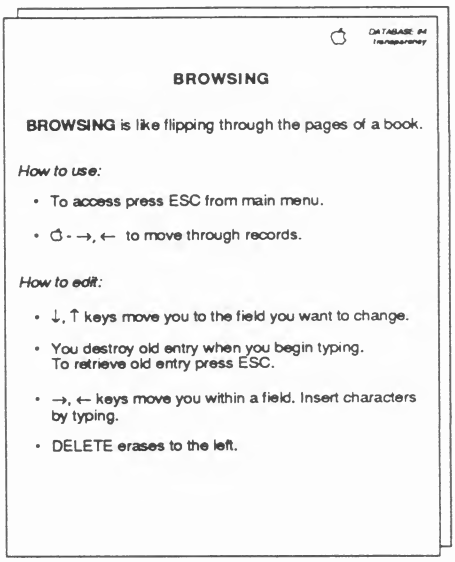
CREATING A NEW FIELD

To create a new field called:

1. Select CREATE FIELD.
2. Select a field type.
3. Type in the name of the new field.
4. Position the field.

4. Demonstrate the basic database operations, **BROWSE**, **SORT**, and **FIND**.

   - Use transparency DATABASE #4: BROWSING to go over **BROWSE**. Demonstrate on the computer using the CLASS file. Note the data type in the lower left corner of the screen as you move the cursor to each field.


DATABASE #4 Transparency

BROWSING

BROWSING is like flipping through the pages of a book.

How to use:

- To access press ESC from main menu.
- ⌂ - →, ← to move through records.

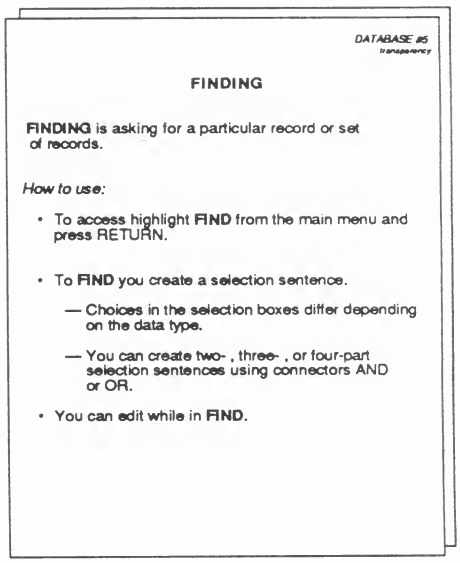
How to edit:

- ↓, ↑ keys move you to the field you want to change.
- You destroy old entry when you begin typing. To retrieve old entry press ESC.
- →, ← keys move you within a field. Insert characters by typing.
- DELETE erases to the left.

   - Explain what **FIND** is, using transparency DATABASE #5: FINDING and the demonstration that follows.

     a. Explain that **FIND** is done by creating selection sentences.

     b. Demonstrate several one-part selection sentences. For example:


DATABASE #5 Transparency

FINDING

FINDING is asking for a particular record or set of records.

How to use:

- To access highlight **FIND** from the main menu and press RETURN.
- To **FIND** you create a selection sentence.
  - — Choices in the selection boxes differ depending on the data type.
  - — You can create two- , three- , or four-part selection sentences using connectors AND or OR.
- You can edit while in **FIND**.

        FIND every record where the **State Born In** field is not New York. (*Note*—use the state in which the workshop is being held).

        FIND every record where the **Birthday** field is in (month) July. (*Note*: You may type in the number 7 for July.)

        FIND every record where the **Years Computing** field is greater than 5.

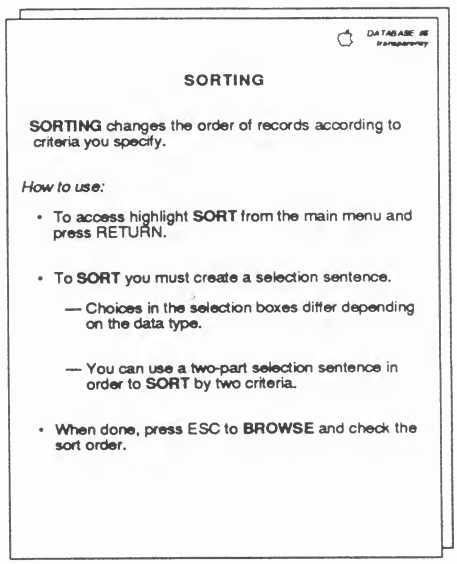
     c. Discuss and demonstrate a few two-part selection sentences. Explain the connectors AND and OR. Have participants suggest sentences and predict what will be found for each. For example:

        FIND every record where the **Birthday** field is in (month) November OR the **Birthday** field is in (month) December.

        FIND every record where the **Birthday** field is in (month) November AND the **Birthday** field is in (month) December. (No records will be found.)

        Note that AND makes the selection sentence more specific; OR makes the selection sentence more general.

- Explain sorting, using transparency DATABASE #6: SORTING and the demonstration that follows.


SORTING
SORTING changes the order of records according to criteria you specify.
How to use:
• To access highlight SORT from the main menu and press RETURN.
• To SORT you must create a selection sentence.
— Choices in the selection boxes differ depending on the data type.
— You can use a two-part selection sentence in order to SORT by two criteria.
• When done, press ESC to BROWSE and check the sort order.

a. Explain that **SORT** is done by creating selection sentences.

b. Demonstrate a one-part sort sentence, such as:

   SORT file by the **Years Computing** field numerically low to high.

c. Discuss and demonstrate a two-part sort sentence, such as:

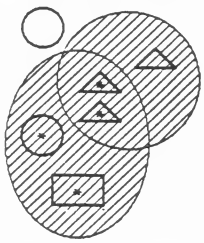
   SORT file by the **State Born In** field alphabetically a to z. When the **State Born In** fields are the same, sort by the **Years Computing** field numerically low to high.

d. After each sentence, press ESC (⇐) to **BROWSE** and check the sort order.

5. Discuss concepts of finding and sorting. As time permits, demonstrate some of the ways that concepts related to finding and sorting may be explained to students. (See pages 56-59 of the *School Filer* Teacher's Guide for more ideas.)

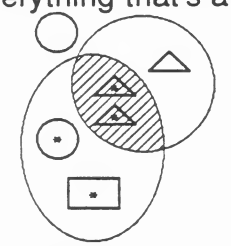
   - Use VENN diagrams to illustrate AND and OR. Using the three diagrams on the board (created in the *PREPARATION* section on p. 16), have three different volunteers come to the board and mark:

     Everything that's a triangle OR has a star.

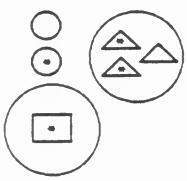
     1. Draw a line around the triangles.
     2. Draw a line around the objects with a star.
     3. Shade everything that's enclosed.

     Everything that's a triangle AND has a star.

     1. Draw a line around the triangles.
     2. Draw a line around the objects with a star.
     3. Shade the intersection.

     Everything that's a triangle AND a rectangle.

     1. Draw a line around the triangles.
     2. Draw a line around the rectangles.
     3. Shade the intersection. (There is none.)

   - Have the participants illustrate the use of AND and OR with their bodies. Call out selection sentences such as the ones below and ask participants to stand if the sentence refers to them.

     Everyone stand up who is...

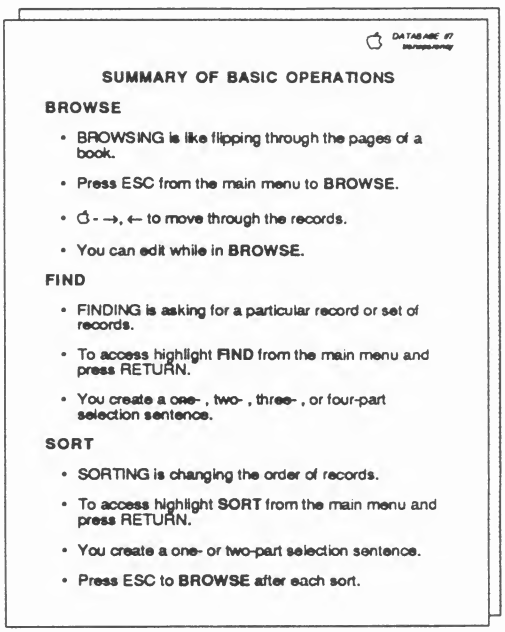
     taller than 5'4" AND has brown hair.

     taller than 5'4" OR has brown hair.

     female AND is shorter than 7 feet AND is male.

   - Have participants illustrate sorting with their bodies. For example, they might sort themselves by sex (primary sort) and (when sex is the same), by height.

6. Summarize **BROWSE**, **FIND**, and **SORT**. Use transparency DATABASE #7: SUMMARY OF BASIC OPERATIONS. Emphasize that all databases have these features, but that they are accessed by different commands.



DATABASE #7

SUMMARY OF BASIC OPERATIONS

BROWSE

- BROWSING is like flipping through the pages of a book.
- Press ESC from the main menu to **BROWSE**.
- ⌘ - →, ← to move through the records.
- You can edit while in **BROWSE**.

FIND

- FINDING is asking for a particular record or set of records.
- To access highlight **FIND** from the main menu and press RETURN.
- You create a one- , two- , three- , or four-part selection sentence.

SORT

- SORTING is changing the order of records.
- To access highlight **SORT** from the main menu and press RETURN.
- You create a one- or two-part selection sentence.
- Press ESC to **BROWSE** after each sort.

LAB:

1. Introduce the activity. Explain to participants that they will be completing an assignment in groups that will give them practice in using the database operations they just learned, **BROWSE**, **FIND**, and **SORT**.

2. Explain the scenario and walk through the first question. (Unless your group is made up of participants with solid computing experience, they will need some direction before they are ready to strike out on their own.) First explain the overall assignment:

   - "CLIMATE FINDERS, INC. is an electronic data research agency, specializing in travel and relocation based on clients' climate needs. You have been hired by Ms. Ima Finder, the president and founder, to help handle the overflow of letters. Your job is to answer the letters assigned to you in a timely and efficient manner." *
   - Read the first question to participants. Using the step-by-step answer that appears on page 23, explain how you would go about answering the letter. Encourage participants to contribute ideas and suggestions.

3. Divide participants into several groups, so that each group has one computer.

   - Try to arrange groups so that they are a mix of more experienced and less experienced participants.
   - Have participants come up with a name for their group, to encourage good-natured competition.

4. Begin the assignment.

   - Place transparency DATABASE #7 summarizing **BROWSE**, **FIND**, and **SORT** on the overhead for participants to refer to as they complete the assignment.
   - Hand out to each group DATABASE A: ASSIGNMENT, the *Bank Street School Filer,* and a data disk with the WORLD file.
   - Tell participants they will have about 20 minutes to work. Circulate among the groups to give them hints or help if needed.

5. Go over the answers after about 20 minutes, or when all groups are finished (see page 23).

* This scenario is taken from *Climate and Weather Databases.*

Helpful Hints:

Try to keep this lesson within the specified time period. Remind participants that they will have many other opportunities to explore the *School Filer*.

When drawing VENN diagrams, use one color for the set-up, a second color for drawing lines around the objects, and a third color for shading the intersection or enclosure.

They May Ask:

Q: How do I get to see the records after I've sorted them?

A: Press ESC (⇐) to **BROWSE**, then hold down the ♌ key (⌘) and use the left or right arrow keys.

Q: My selection sentence didn't seem to work. I got all of the records instead of just the ones that fit the selection criteria. How come?

A: You probably pressed ESC (⇐) (twice) after selecting records. When you use **FIND**, do not press ESC (⇐) afterwards to see the records. The ones you have selected will already be available for your perusal. You need only hold down the ♌ (⌘) key and press the left or right arrow keys. After you have looked at the records, press ESC (⇐) to return to the main menu.

Q: What does the diagram in the upper right hand corner of the screen indicate?

A: The large rectangle represents the entire area available for entering data in a single record. The small rectangle within represents the portion displayed on the screen. If you move the cursor to a field that does not appear on the screen, the screen will scroll both horizontally and vertically to show the field, and you will see the small rectangle move, indicating what portion of the record is currently visible on the screen.

Q: How do you move quickly from the beginning of the record to the end of the record (the COMMENT field)?

A: Press ♌-B (⌘-B) for beginning and ♌-E (⌘-E) for end. From the **BROWSE** mode, you may press ♌-? (⌘-?) to see a list of these and other commands.

Q: How do I ...? (For example: How do I move to the next record?)

A: First try to answer your question by reading the prompts at the top of the screen. If that doesn't help, press the Apple (C) key and ? for help. The Quick Start Card that comes with the Reference Manual may also have the answer. (NOTE: If participant is still confused, see what you can do to help.)

Q: How many characters can you fit in a field?

A: Generally, the maximum length of a field is 78 spaces, assuming all 15 spaces are used for the field name. However, there is also a COMMENT field, revealed by pressing Apple-C (C - C), which can hold up to 7 lines or 255 characters of text. The COMMENT field is like a little notecard attached to each of your records.

Q: How many database files can you save on a data disk?

A: To some extent, it depends on the size of each file, but generally you can fit many files, say 10 - 20 or more.

Q: How many fields can you fit in a record?

A: The maximum number of fields in a record is 50. However, you will probably never design a record with that many fields. (Having that many fields would severely limit the number of records you could fit in the file and it would be difficult to view them all on the screen, especially in 40 columns.)

Q: How many records can you fit in a file?

A: The number of records you can fit in a file depends on the number of fields in each record and the amount of data in each field. We'll talk more about this when we create our own files. However, as a general guideline, given a file with good-size records (fields fill the screen and then some in 80 columns), you could fit about 50 records in the 64K Apple version of the *School Filer*. You could fit about 3 times as many, or 150 records, in the 128K Apple *School Filer*. The Commodore version can hold about 75 records. The absolute maximum number of records you can store in a 64K Apple file is 255. With the 128K Apple version, the absolute maximum number of records is 512. For Commodore 64, the maximum is 300 records.

Q: Is the Apple *School Filer* DOS or ProDOS?

A: DOS 3.3 is the disk operating system for the *School Filer*. There is not a ProDOS version of the *School Filer* yet.

ANSWERS
to Assignment

Letter #1—Priscilla Price

1. To find out how many stations are warmer in January than in July, create the following selection sentence:

   FIND every record where the **Jan. High** field is greater than the **July High** field.

   Hold down the ♁ (⌘) key and press the right arrow key to look at the records you found. Check the **N/S** field to find out where most of the stations are located.

   Answer: 19 stations are warmer in January than July. Most are located in the Southern Hemisphere.

2. To find which stations are farthest from the equator, create the following **SORT** sentence:

   SORT the file by the **Lat.** field numerically high to low.

   Press ESC (⎋) to **BROWSE** through the records. The first record is farthest from the equator. Hold down the ♁ (⌘) key and press the right arrow key twice to see the next two records.

   Answer: the 3 stations farthest from equator (in this database) are South Pole, Antarctica; McMurdo, Antarctica; Thule, Greenland.

Letter #2—Dame Elizabeth Dimwittle

1. To find out where it has never been below freezing (32° F), create the following selection sentence:

   FIND every record where the **Record Low** field is greater than 32.

   Notice how many records you find—the number is in the top left corner of your screen.

   Answer: 24 stations in this database never get below freezing.

2. To find out if there are any stations that have never been below freezing and are not in the tropic zone, create the following selection sentence:

   FIND every record where the **Record Low** field is greater than 32 and where the **Zone** field is not tropic.

   Answer: Perth, Australia, and Sydney, Australia, are the only two stations outside the tropics where it has never been below freezing.

Letter # 3—Stanley Slicktalker

1. To find places where it is below freezing all year round, create the following selection sentence:

   FIND every record where the **Jan. High** field is less than 32 and where the **July High** field is less than 32.

   Answer: the following places are below freezing all year round: McMurdo, Antarctica; South Pole, Antarctica; Esmitte, Greenland.

ACTIVITY: USING PREPARED DATABASES

OVERVIEW

Objectives:

- To present a model lesson, showing how databases can be applied to a subject area; how they can be used with other reference materials, such as books and maps; and how they can encourage the development of inquiry skills.
- To demonstrate the use of COMPUTED fields and the COMMENT field.
- To acquaint participants with the style and format of the Sunburst databases for the *Bank Street School Filer.*
- To give participants an opportunity to try out databases prepared for use with the *School Filer.*

Materials:

Software:

DEMO file (on Presenter's Data Disk)
Bank Street School Filer (Teacher's Guide and disks)
Sunburst Databases (Teacher's Guide and disks):

Animal Life
Astronomy
Climate and Weather
Endangered Species
North America
Colonial Times
Space
United States

Handouts:

PREPARE A: UNITED STATES DENSITY MAP (see *Preparation* on the next page)
PREPARE B: SUNBURST DATABASES AND SCHOOL FILER SAMPLE FILES
PREPARE C: QUICK START CARD*

Transparencies:

PREPARE #1: REGION ABBREVIATIONS
PREPARE #2: CREATING A COMPUTED FIELD
PREPARE #3: DENSITY OF STATES BY REGION
PREPARE #4: THE COMMENT FIELD*
PREPARE #5: THINKING SKILLS

Supplies:

colored pencils or highlighters (for density map)

* There are two versions, Apple and Commodore. Be sure you have the correct one.

Preparation:

1. Make at least one copy of PREPARE A. Make sure you have enough copies of PREPARE B and PREPARE C for each participant. You may want to copy PREPARE C onto 2 sides of one page.

2. Depending on the number of people in your workshop, their interests, and the grades they teach, you may need more than one copy of some of the databases.

3. Boot the *School Filer* on each computer.

4. Place transparencies by the overhead in the order you will need them.

5. Create a density map. Using a set of colored pencils or highlighters, color in the states on a copy of PREPARE A according to the colors indicated on the map on page 35. Color states labeled R in red, Y in yellow, G in green, B in blue, and O in orange. Also color in the key.

NOTE: The DEMO file is a version of the GENERAL file found on the *United States* Database Disk. It has been modified for easy display in 40 columns. Specifically, the fields **Est. 1984**, **Gov.'s Salary**, **Tree**, **Bird**, and **Nickname** have been deleted and the information in the field **Origin of Name** has been typed into the COMMENT field. Several of the other fields have been arranged to line up on the left side of the screen. For more information about the GENERAL file, see the teacher materials in the *United States Databases*.

OUTLINE

	TIME	PAGE
DEMO: 1. Explain purpose of lesson.	1 minute	28
2. Use DEMO file to review **BROWSE**, **FIND**, **SORT**. • Review the fields. Use transparency PREPARE #1: REGION ABBREVIATIONS for the **Region** field. • **FIND** all records where population is greater than 5,000,000, and then 10,000,000. • **SORT** by **Population** high to low. • **SORT** by **Size(Sq.miles)** high to low.	12 minutes	28
3. Create a COMPUTED field, **Density**. • Use transparency PREPARE #2: CREATING A COMPUTED FIELD. • **SORT Density** field high to low.	7 minutes	29
4. Discuss possible follow-up activities.	4 minutes	30
5. Demonstrate the COMMENT field. • Use transparency PREPARE #4: COMMENT FIELD. • Do several selection sentences relating to the COMMENT field.	5 minutes	31
LAB: 1. Discuss the various prepared databases offered by Sunburst.	2 minutes	32
2. Tell participants they will be choosing one Sunburst database to explore in detail. • When they are done, they can look at other databases in less detail. • Hand out PREPARE B: SUNBURST DATABASES AND SCHOOL FILER SAMPLE FILES and PREPARE C: QUICK REFERENCE CARD for reference.	3 minutes	32
3. Begin lab work, with participants working in pairs.	30 minutes	33
4. Discuss and summarize.	8 minutes	33
5. Discuss thinking skills involved. • Use transparency PREPARE #5: THINKING SKILLS.	3 minutes	33

SCRIPT

DEMO:

1. Explain the purpose of this lesson.

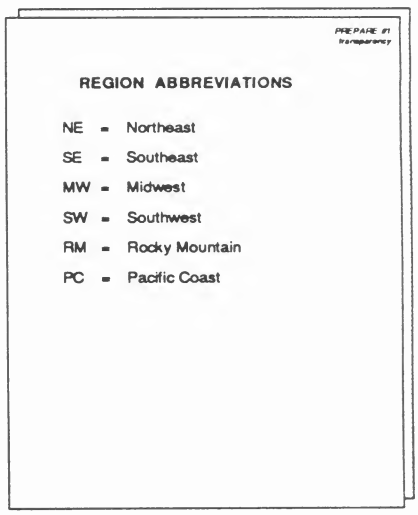
   "When we used the CLASS and WORLD files, we learned how a database program works—how to **BROWSE**, **SORT**, and **FIND**; how to edit data, and add a new record. We also experienced one way to introduce databases to students—by having them create a file about themselves.

   "Now, using a prepared database, we will see how databases can be applied to a subject area; how they can be used with other reference materials, such as books and maps; and how they can encourage the development of inquiry skills.

   "You already got a brief glimpse of one prepared database, the WORLD file from *Climate and Weather Databases.*"

2. Use the DEMO file to review **BROWSE**, **FIND** and **SORT**. **RETRIEVE** the DEMO file. Note that in this case, every record refers to one state. **BROWSE** through a few of the records, so participants get an idea of what the file contains.

   - Read the field names and tell what is contained in each. (See the Database Overview for the GENERAL file if you need more information.) Point out the **Region** field and, using transparency PREPARE #1: REGION ABBREVIATIONS, note what each abbreviation stands for.


PREPARE #1
Transparency

REGION ABBREVIATIONS

NE = Northeast
SE = Southeast
MW = Midwest
SW = Southwest
RM = Rocky Mountain
PC = Pacific Coast

   - Ask participants, What is a big state in terms of population? 100,000 people? 1 million? 5 million? more?

     FIND all records where the **Population** field is greater than 5,000,000.

   - Note that 14 records were selected. Point to the number 14 in the top left corner of the screen. Explain that 14 is more states than you might want to find.

   - Create a new selection sentence, this time increasing the population figure to 10,000,000. (**FIND** all of the records where the **Population** field is greater than 10,000,000.)

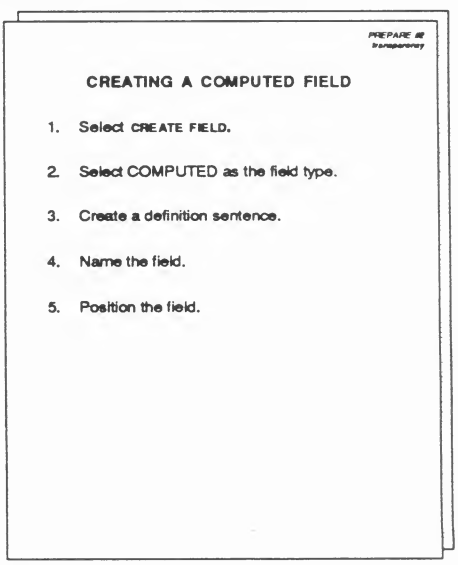
- Note that when creating this selection sentence, you may simply press RETURN to repeat "Population" and "IS GREATER THAN." Edit the figure 5,000,000 by deleting the 5 and inserting 10.
- Note that this time 6 records were selected. Look at the records to see the state names and populations. Ask participants to list the three biggest states (in terms of population).
- Ask how you could put the states in order of population. (By sorting.)

  SORT by population, numerically high to low.
- Before you **BROWSE**, ask participants to predict what will be some of the least populated states.
- Use ⌘ - →, ← (Ctrl - →, ←) to look at the least populated states.
- Ask participants whether they think the most populated states are also the largest states in terms of size. Ask for predictions on the largest and smallest states.

  SORT by **Size(Sq.miles)** and **BROWSE** to see if predictions were correct.

3. Create a COMPUTED field, **Density**. Explain that you are going to create this field to examine the relationship between population and size. Explain each step in the process, following the points on overhead PREPARE #2: CREATING A COMPUTED FIELD as you demonstrate on the computer.

   - At #3 on the transparency, ask participants what fields and operation they think will be needed in order to create the **Density** field. The answer is to start with the **Population** field. Divide by the **Land(Sq.miles)** field.
   - When you position the field, put it on the line between the **Abbreviation** and **Population** fields, and space over so it is roughly in the middle of the 40-column screen. Note that you are positioning the new field near the field **Region** because you will want participants to look at the relationship between these two fields.


PREPARE #2 transparency

CREATING A COMPUTED FIELD

1. Select CREATE FIELD.
2. Select COMPUTED as the field type.
3. Create a definition sentence.
4. Name the field.
5. Position the field.

   - Note also that **Land(Sq.miles)** is used instead of **Size(Sq.miles)**, which includes inland waterways, because in the United States, density is based on just the land.

- Explain that the information in the **Density** field is calculated automatically, based on information in the **Population** and **Land(Sq.miles)** fields.

- **SORT** the file by the new **Density** field high to low. Before you press RETURN at the end of the **SORT**, ask participants to predict what some of the most and least densely populated states are. On what have they based their predictions? Where might some of these states be located?

- **BROWSE** through the first ten records. Note that New Jersey has almost 1,000 people per square mile. Prompt participants to discover that the first 8 records are all found in the Northeast. Continue browsing, paying particular attention to the **Region** and **Density** fields.

- Skip 10 records at a time (using ⌘-> or ⌘->) until you are near the end of the file. As you browse through the last 5-10 states, note where most of these are located (in the west, particularly the Rocky Mountain region and Alaska). Note that most of these states have less than 10 people per square mile, and Alaska has less than 1 person per square mile.

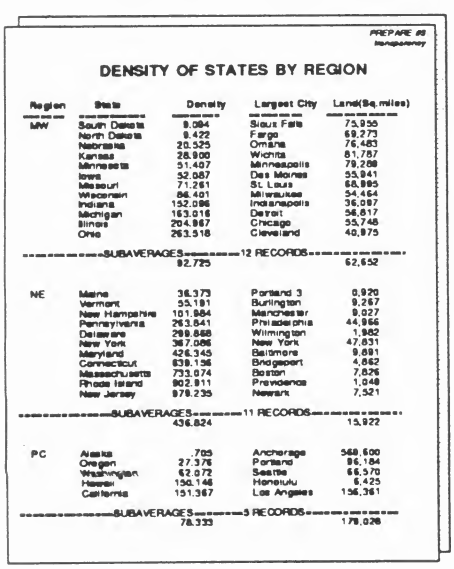
- Ask participants to suggest why some of these population trends might have come about.

4. Discuss possible followup activities which might be undertaken by students after using a file such as this:

   - Students may do further research to investigate U.S. population trends. They could use the CLIMATE and ECONOMY files, both found in *United States Databases*, as well as textbooks, library books, reference books.

   - Students might create a Density map using color coding to indicate regions of similar density. Display and explain the colored-in map you created prior to this lesson (PREPARE A).

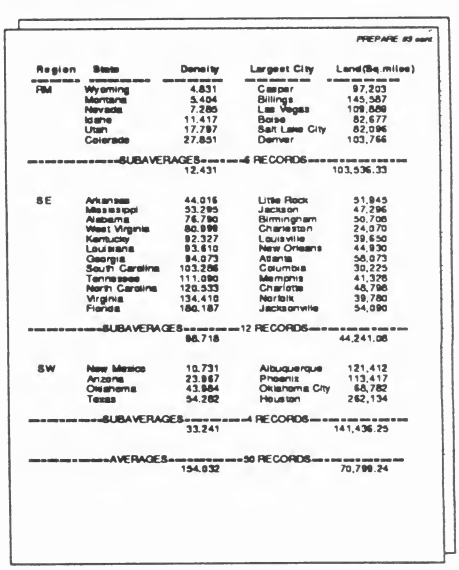
   - Students might design a report, such as the one shown in transparency PREPARE #3. Note that states are sorted by both **Region** and **Density**, and that both subaverages and averages are calculated.



PREPARE #3

DENSITY OF STATES BY REGION

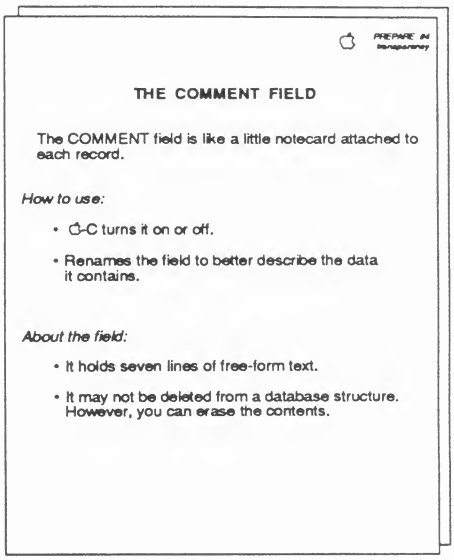
Region	State	Density	Largest City	Land(Sq.miles)
MW	South Dakota	9.084	Sioux Falls	75,955
	North Dakota	9.422	Fargo	69,273
	Nebraska	20.525	Omaha	76,483
	Kansas	28.900	Wichita	81,787
	Minnesota	51.407	Minneapolis	79,289
	Iowa	52.087	Des Moines	55,941
	Missouri	71.261	St. Louis	68,995
	Wisconsin	86.401	Milwaukee	54,464
	Indiana	152.096	Indianapolis	36,097
	Michigan	163.016	Detroit	56,817
	Illinois	204.867	Chicago	55,746
	Ohio	263.518	Cleveland	40,975
	----------SUBAVERAGES----------	92.725	12 RECORDS----------	62,652
NE	Maine	36.373	Portland 3	8,926
	Vermont	55.181	Burlington	9,267
	New Hampshire	101.864	Manchester	9,027
	Pennsylvania	263.841	Philadelphia	44,966
	Delaware	299.888	Wilmington	1,982
	New York	367.086	New York	47,831
	Maryland	426.345	Baltimore	9,881
	Connecticut	638.136	Bridgeport	4,862
	Massachusetts	733.074	Boston	7,826
	Rhode Island	902.811	Providence	1,048
	New Jersey	978.235	Newark	7,521
	----------SUBAVERAGES----------	436.824	11 RECORDS----------	15,922
PC	Alaska	.705	Anchorage	568,600
	Oregon	27.376	Portland	96,184
	Washington	62.072	Seattle	66,570
	Hawaii	150.146	Honolulu	6,425
	California	151.367	Los Angeles	156,361
	----------SUBAVERAGES----------	78.333	5 RECORDS----------	178,028



PREPARE #3 cont

Region	State	Density	Largest City	Land(Sq.miles)
RM	Wyoming	4.831	Casper	97,203
	Montana	5.404	Billings	145,587
	Nevada	7.286	Las Vegas	109,889
	Idaho	11.417	Boise	82,677
	Utah	17.797	Salt Lake City	82,096
	Colorado	27.851	Denver	103,766
	----------SUBAVERAGES----------	12.431	6 RECORDS----------	103,536.33
SE	Arkansas	44.016	Little Rock	51,945
	Mississippi	53.295	Jackson	47,296
	Alabama	76.790	Birmingham	50,706
	West Virginia	80.999	Charleston	24,070
	Kentucky	92.327	Louisville	39,650
	Louisiana	93.610	New Orleans	44,930
	Georgia	94.073	Atlanta	58,073
	South Carolina	103.286	Columbia	30,225
	Tennessee	111.080	Memphis	41,376
	North Carolina	120.533	Charlotte	48,798
	Virginia	134.418	Norfolk	39,780
	Florida	180.187	Jacksonville	54,090
	----------SUBAVERAGES----------	98.718	12 RECORDS----------	44,241.08
SW	New Mexico	10.731	Albuquerque	121,412
	Arizona	23.987	Phoenix	113,417
	Oklahoma	43.884	Oklahoma City	68,782
	Texas	54.282	Houston	262,134
	----------SUBAVERAGES----------	33.241	4 RECORDS----------	141,436.25
	----------AVERAGES----------	154.032	30 RECORDS----------	70,798.24

5. Explain and demonstrate the COMMENT field, referring to transparency PREPARE #4: THE COMMENT FIELD.


PREPARE #4
THE COMMENT FIELD
The COMMENT field is like a little notecard attached to each record.
How to use:
• ⌘-C turns it on or off.
• Renames the field to better describe the data it contains.
About the field:
• It holds seven lines of free-form text.
• It may not be deleted from a database structure. However, you can erase the contents.

- Note that in this file the COMMENT field has been named **Origin of Name** and used to store information on the origin of each state's name.

- Do several selection sentences relating to **Origin of Name**. Each time, ask participants to make predictions about how many states they will find and where the states will be located. Interesting selection sentences include:

  FIND every record where the **Origin of Name** field contains English.

  FIND every record where the **Origin of Name** field contains Indian.

  FIND every record where the **Region** field is MW and the **Origin of Name** field does not contain Indian.

  FIND every record where the **Origin of Name** field contains Spanish.

  FIND every record where the **Origin of Name** field contains French.

  FIND every record where the **Origin of Name** field does not contain English and the **Origin of Name** field does not contain Indian. Of these (and), **FIND** only the records where the **Origin of Name** field does not contain Spanish and the **Origin of Name** field does not contain French.

- Note that information was entered in a way that will make it easy for students to discover relationships. For example, the record for North Carolina reads "in honor of the English King Charles I" instead of "in honor of King Charles I of England".

- You might also note that Indian names tended to describe natural places or phenomena, while English names tended to honor famous people, especially royalty.

LAB:

1. Hold up the *United States Databases* Teacher's Guide. Explain that most of the Sunburst database packages include six different databases.

   - Three of the databases are complete (GENERAL, ECONOMY, and CLIMATE); two databases (BOOKS and GLOSSARY) are complete but are meant to be expanded; and the last (PERSONAL) is one which the students research and build.

   - *Climate and Weather* has a different format from the others. Its main database (WORLD) uses a scenario approach to explore world climates (point out that the assignment completed earlier in the workshop was taken from this database).

   - *Our Town* contains only databases which the students will research and build.

2. Tell participants that they will be choosing a Sunburst database package to look at in detail.

   - Ask them to:

     a. look at the types of databases included in the package and select one or two to work on.

     b. read through the For The Teacher materials, then complete a few of the Activity Sheets.

     c. think about possible questions of their own to ask. Have them share any new questions and answers with the group at the end of the session.

   - Tell participants that when they have finished looking at one database package, they can look at other databases of interest, including sample files from the *School Filer* Database Disk. Note that:

     a. Some of these sample files (STATES, WANT ADS, SIGNERS, WHALES, REVIEWS, and ADDRESS) include Guide Sheets in the *School Filer* Teacher's Guide.

     b. There is a brief description of all sample files in Appendix E, p. 160 (p. 158 for Commodore version), of the *School Filer* Teacher's Guide.

   - Hand out PREPARE B: SUNBURST DATABASES AND SCHOOL FILER SAMPLE FILES, which lists the databases and sample files by subject area, and PREPARE C: QUICK REFERENCE CARD, a guide to the *School Filer*. (Participants can refer to the card if they need help when they work at the computer.)

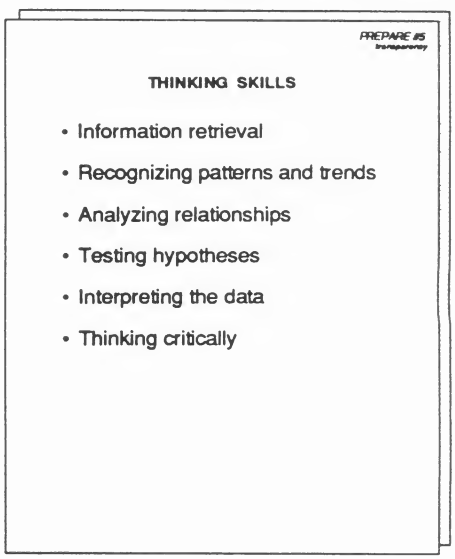
   - Note that many of the databases touch on more than one subject area. For example, the CANADA file has an Investigating Conversions Student Activity Sheet that uses math and an Investigating Climate Student Activity Sheet that raises science questions.

3. Have participants work in pairs as they explore the databases.

4. After about 30 minutes of lab work, bring the group together again for a short discussion period. Discussion points and questions might include:

   - Any comments or ideas about the prepared databases? What were some of the typical questions or problems that came up?
   - What did you learn? How?
   - What else would you like to see (in terms of topics or approaches)? Did anyone look at *Climate and Weather*? What did you think of the scenario approach?
   - Were the support materials helpful? How? What are some of the crucial things that should be available in support materials for databases? (Answers could include a strong teacher section with generalizations, lesson plans, sources, and answers.)
   - How and what needs do these databases fill?
   - Did anyone make up any of their own questions? What were they and what were the answers?
   - What are the advantages of working in pairs? (Answers might include the emphasis on cooperation to find solutions, realizing that there is often more than one way of arriving at a solution, and being able to use each of the partners' strengths.)
   - Did you disagree with any of the information? For example, some textbooks say Oklahoma is in the midwest region of the United States. Others consider it to be in the southwest. (Entering information into databases often requires judgment calls. However, information can be corrected easily or adapted to suit particular needs.)
   - There are times when information can be misinterpreted. This can happen for many reasons, including insufficient data or incorrectly assuming a causal relationship. Did this happen to anyone? Describe what happened.

5. Ask participants what thinking skills they felt they used in working with the databases. Present those listed in transparency PREPARE #5: THINKING SKILLS.



Helpful Hints:

You can liken the COMPUTED field to a mini-spreadsheet and the COMMENT field to a mini-word processor.

Urge participants to explore one or two databases within a package in depth, rather than jump from one to another. It will give them a much better feel for the scope of the materials and the level of inquiry available for their students.

Encourage participants to work in pairs or small groups, since it fosters a team strategy, cooperation, and using each other's advice and strengths.

They May Ask:

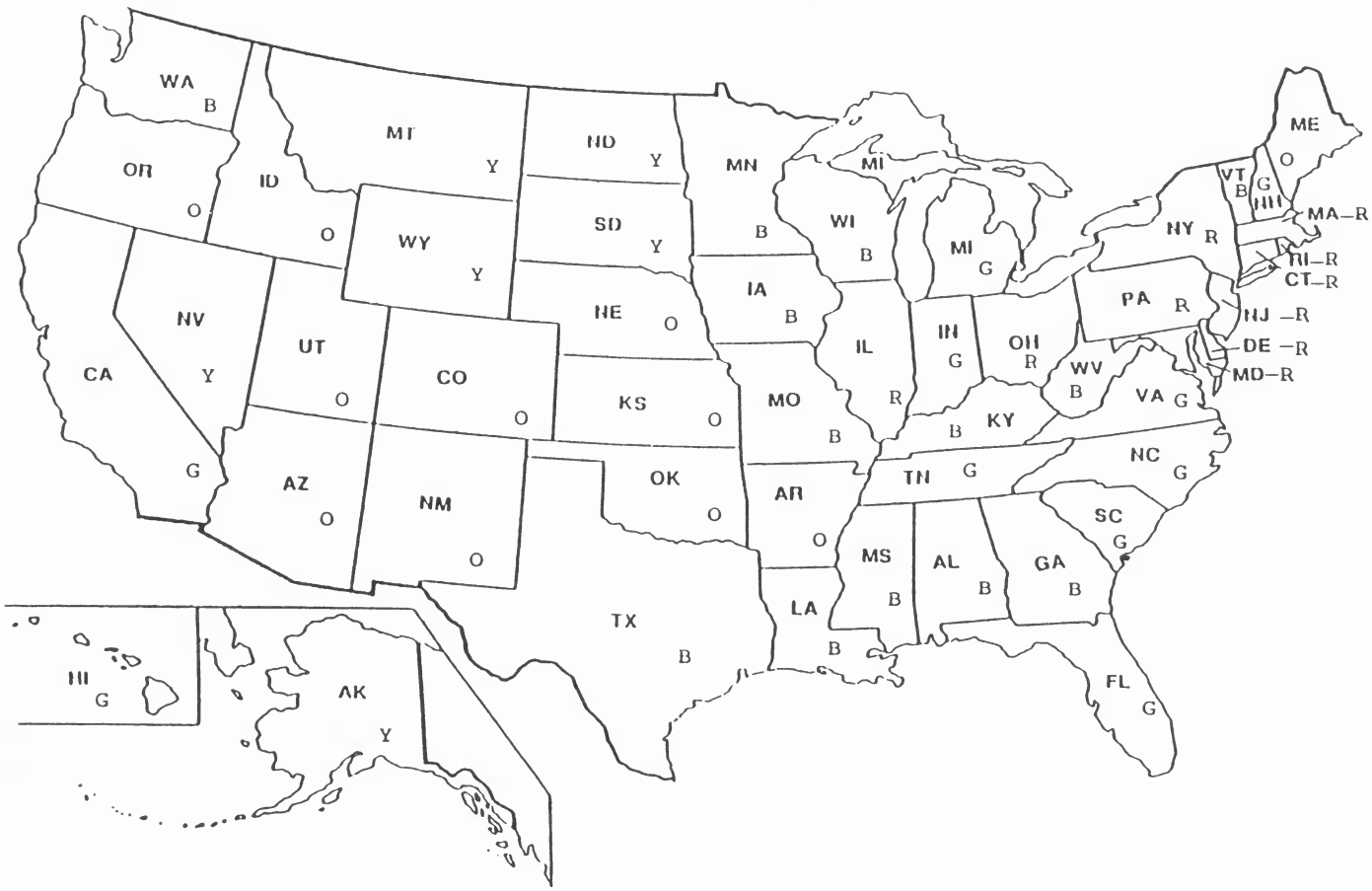
Q: Is this data correct? (For example, when using the LOG file in the *Astronomy* databases, participants may question whether the hottest Monday in New York City in 1985 was really only 86 degrees Fahrenheit.)

A: Information in the databases has been thoroughly checked, however the sources for each database are listed in case anyone would like to verify a fact.

Q: How do I print a stored report?

A: Highlight USE A STORED REPORT and press RETURN. Press RETURN in response to all of the questions. Press S to send the report to the screen. Use the spacebar to start and stop the report.

Color Code for U.S. Density Map



Density of States in US

R = red	R ☐ 200 - 1000 people per square mile
G = green	G ☐ 100 - 200
B = blue	B ☐ 50 - 100
O = orange	O ☐ 10 - 50
Y = yellow	Y ☐ 0 - 10

ACTIVITY: PRINTING REPORTS

OVERVIEW

Objective:

- To introduce participants to all types of reports in the *Bank Street School Filer.*
- To teach participants how to print STORED REPORTS and QUICK REPORTS.
- To teach participants how to create and print CUSTOM REPORTS.

Materials:

Software:
STUDENTS file (Presenter's Data Disk)
Bank Street School Filer

Transparencies:
REPORT #1: REPORTS OVERVIEW
REPORT #2: QUICK TABLE REPORT
REPORT #3: QUICK LIST REPORT
REPORT #4: QUICK SCREEN REPORT
REPORT #5: QUICK BLANK FORM
REPORT #6: PRINTING A QUICK LIST REPORT*
REPORT #7: CUSTOM TABLE REPORT
REPORT #8: CUSTOM PAGE REPORT
REPORT #9: CUSTOM TEXT REPORT
REPORT #10: REPORT PLANNING SHEET
REPORT #11: PRINTING A CUSTOM TABLE REPORT
REPORT #12: FORMAT RANGES

Preparation:

If possible, attach a printer to the demonstration computer.

Place the transparencies by the overhead projector in the order that you will need them.

RETRIEVE the file STUDENTS (from the Presenter's Data Disk).

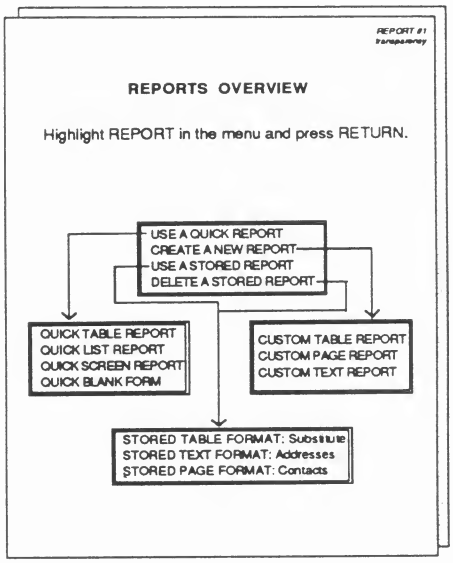
* There are two versions, Apple and Commodore. Be sure you have the correct one.

OUTLINE

	TIME	PAGE
1. Explain and demonstrate overall report structure. • Use transparency REPORT #1: REPORTS OVERVIEW.	4 minutes	38
2. Explain and demonstrate QUICK REPORTS. • Use transparencies REPORT #2-#5 as examples. • Use transparency REPORT #6: PRINTING A QUICK LIST REPORT to demonstrate printing a QUICK LIST REPORT.	8 minutes	38
3. Explain CUSTOM REPORTS. • Use transparencies REPORT #7-#9 as examples.	5 minutes	40
4. Discuss planning a CUSTOM TABLE REPORT on allergies. • Use transparency REPORT #10: REPORT PLANNING SHEET.	3 minutes	40
5. Demonstrate designing and printing the report. • Use transparency REPORT #11: PRINTING A CUSTOM TABLE REPORT. • Use transparency REPORT #12: FORMAT RANGES to discuss formatting the report.	7 minutes	41
6. Summarize printing reports. • Use transparency REPORT #1: REPORTS OVERVIEW.	3 minutes	42

SCRIPT

1. Refer to transparency REPORT #1: REPORTS OVERVIEW as you explain the overall structure of the reports available in the *School Filer*.



- Demonstrate how to get the menu containing **REPORT** (**PRINT REPORT** in 80 columns) by pressing ESC (←) and how to select **REPORT** by pressing RETURN. Note that with a Commodore or 64K Apple *School Filer,* you have to place the program disk briefly in the drive.

- Explain the four choices in the first box:

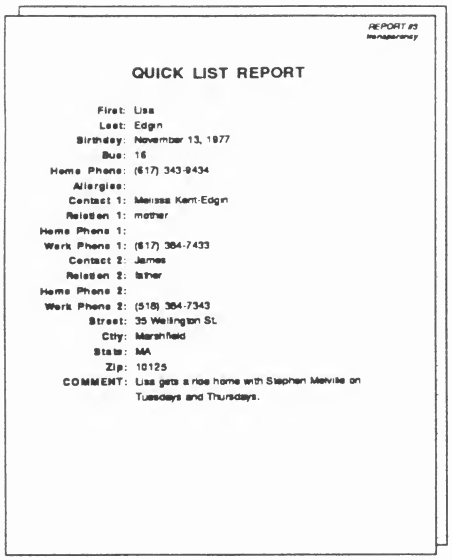
  "USE A QUICK REPORT lets you use one of several predefined report formats.

  "CREATE A NEW REPORT lets you design your own report formats—to customize them to your needs.

  "USE A STORED REPORT lets you use a previously designed report format that you have saved. You can save up to three of them.

  "DELETE A STORED REPORT lets you erase a stored report format and make room to store another."

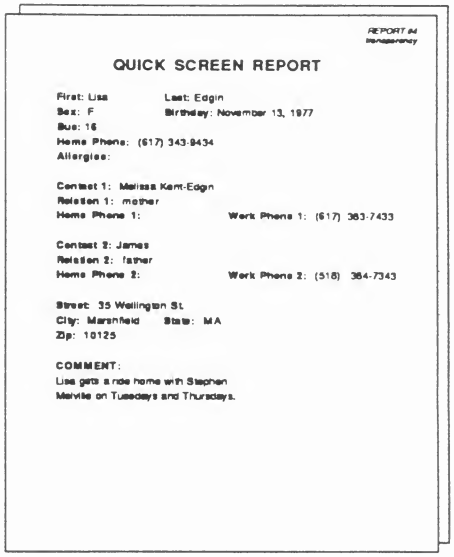
2. Highlight USE A QUICK REPORT and press RETURN. Use transparencies REPORT #2 - #5 as examples of the four types of quick reports as you explain each type:



REPORT #5
Transparency

QUICK LIST REPORT

First: Lisa
Last: Edgin
Birthday: November 13, 1977
Sex: F
Age: 16
Home Phone: (617) 343-8434
Allergies:
Contact 1: Melissa Kent-Edgin
Relation 1: mother
Home Phone 1:
Work Phone 1: (617) 364-7433
Contact 2: James
Relation 2: father
Home Phone 2:
Work Phone 2: (518) 364-7343
Street: 35 Wellington St.
City: Marshfield
State: MA
Zip: 10125
COMMENT: Lisa gets a ride home with Stephen Melville on Tuesdays and Thursdays.



REPORT #4
Transparency

QUICK SCREEN REPORT

First: Lisa Last: Edgin
Sex: F Birthday: November 13, 1977
Age: 16
Home Phone: (617) 343-8434
Allergies:

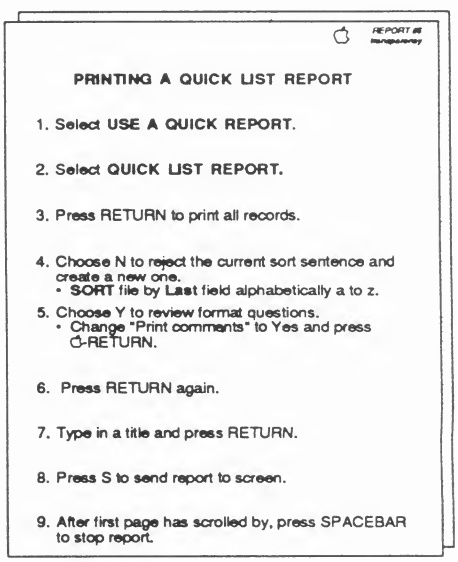
Contact 1: Melissa Kent-Edgin
Relation 1: mother
Home Phone 1: Work Phone 1: (617) 364-7433

Contact 2: James
Relation 2: father
Home Phone 2: Work Phone 2: (518) 364-7343

Street: 35 Wellington St.
City: Marshfield State: MA
Zip: 10125

COMMENT:
Lisa gets a ride home with Stephen Melville on Tuesdays and Thursdays.

- "Here is an example of a QUICK TABLE REPORT. A QUICK TABLE REPORT prints a table using as many fields as will fit across the top of the page (in the order they appear on the screen). It shortens each field to 15 characters.
- "Here is an example of a QUICK LIST REPORT. A QUICK LIST REPORT prints all the fields for each record one below another, in a list on the page. If the field is longer than one line, it will wrap around to the next line—thus assuring you of getting the whole field.
- "Here is an example of a QUICK SCREEN REPORT. A QUICK SCREEN REPORT prints out each record as it appears on the screen."
- Explain that the QUICK BLANK FORM is not a real report, but prints a single blank record with only the field names, positioned as they appear on the screen.
- Demonstrate printing a QUICK LIST REPORT using the STUDENTS file. Print to the screen, instead of the printer. Explain each step as you go, referring to transparency REPORT #6: PRINTING A QUICK LIST REPORT.

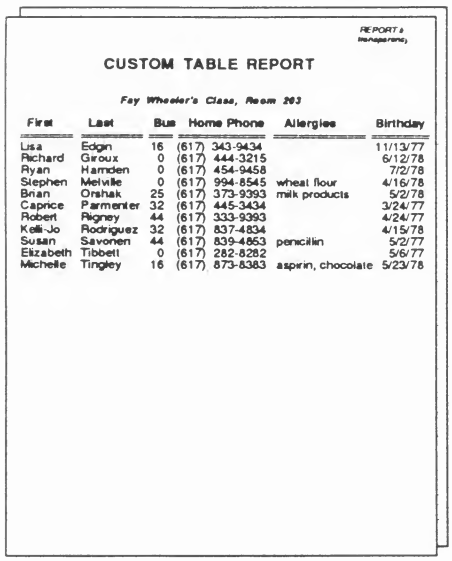


REPORT #6
Transparency

PRINTING A QUICK LIST REPORT

1. Select **USE A QUICK REPORT.**
2. Select **QUICK LIST REPORT.**
3. Press RETURN to print all records.
4. Choose N to reject the current sort sentence and create a new one.
   - **SORT** file by **Last** field alphabetically a to z.
5. Choose Y to review format questions.
   - Change "Print comments" to Yes and press ⌘-RETURN.
6. Press RETURN again.
7. Type in a title and press RETURN.
8. Press S to send report to screen.
9. After first page has scrolled by, press SPACEBAR to stop report.

3. Use transparencies REPORT #7 - #9 as examples of CUSTOM REPORTS as you explain CREATING NEW REPORTS. Press ESC (⇐) to go back to the main menu, and highlight **CREATE A NEW REPORT.** Press RETURN.

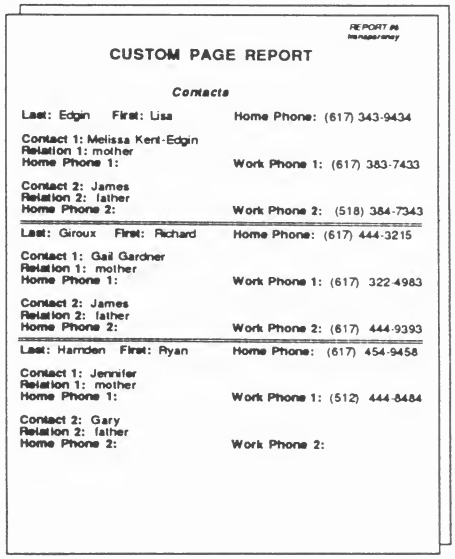


REPORT 7 transparency

CUSTOM TABLE REPORT

Fay Wheeler's Class, Room 203

First	Last	Bus	Home Phone	Allergies	Birthday
Lisa	Edgin	16	(617) 343-9434		11/13/77
Richard	Giroux	0	(617) 444-3215		6/12/78
Ryan	Hamden	0	(617) 454-9458		7/2/78
Stephen	Melville	0	(617) 994-8545	wheat flour	4/16/78
Brian	Onishak	25	(617) 373-9393	milk products	5/2/78
Caprice	Parmenter	32	(617) 445-3434		3/24/77
Robert	Rigney	44	(617) 333-9393		4/24/77
Kelli-Jo	Rodriguez	32	(617) 837-4834		4/15/78
Susan	Savonen	44	(617) 839-4853	penicillin	5/2/77
Elizabeth	Tibbett	0	(617) 282-8282		5/6/77
Michelle	Tingley	16	(617) 873-8383	asprin, chocolate	5/23/78



REPORT #8 transparency

CUSTOM PAGE REPORT

Contacts

Last: Edgin First: Lisa — Home Phone: (617) 343-9434
Contact 1: Melissa Kent-Edgin
Relation 1: mother
Home Phone 1: — Work Phone 1: (617) 383-7433
Contact 2: James
Relation 2: father
Home Phone 2: — Work Phone 2: (518) 384-7343

Last: Giroux First: Richard — Home Phone: (617) 444-3215
Contact 1: Gail Gardner
Relation 1: mother
Home Phone 1: — Work Phone 1: (617) 322-4983
Contact 2: James
Relation 2: father
Home Phone 2: — Work Phone 2: (617) 444-9393

Last: Hamden First: Ryan — Home Phone: (617) 454-9458
Contact 1: Jennifer
Relation 1: mother
Home Phone 1: — Work Phone 1: (512) 444-8484
Contact 2: Gary
Relation 2: father
Home Phone 2: — Work Phone 2:

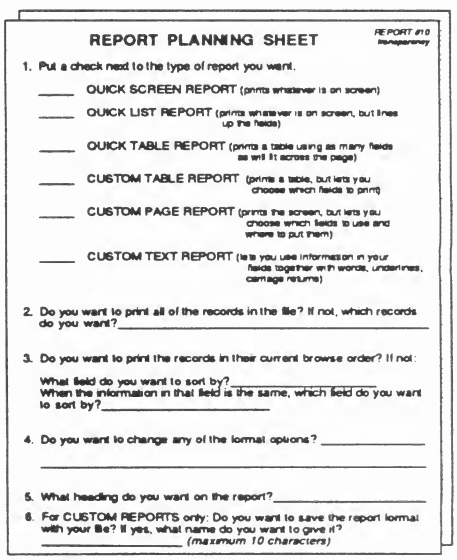
- "Here is an example of a CUSTOM TABLE REPORT. A CUSTOM TABLE REPORT prints a table, but lets you choose which fields to print and in which order the fields will appear across the page.

- "Here is an example of a CUSTOM PAGE REPORT. A CUSTOM PAGE REPORT prints the screen, but lets you choose which fields to use and where to put them on the page. This example shows you how a list of contact people for each student in your class could be prepared.

- "Here is an example of a CUSTOM TEXT REPORT. A CUSTOM TEXT REPORT lets you use information in the fields together with other words of your own choice, underlines, and carriage returns. This example shows you a set of mailing labels designed using this report format."

- Note that the CUSTOM TABLE REPORT format is probably the most useful for students since it facilitates making predictions and comparisons, spotting trends, and discovering relationships. It can provide subaverages, averages, subtotals, and totals.

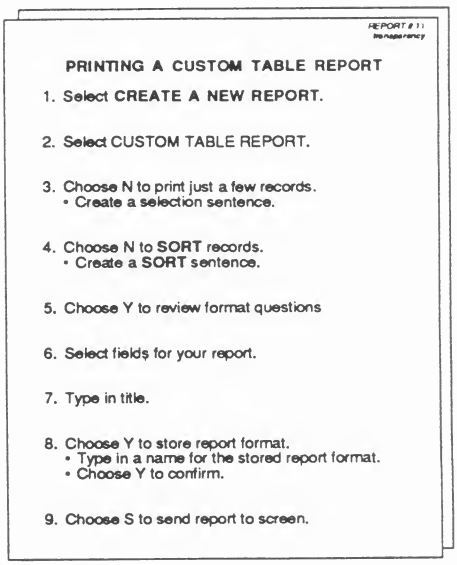
4. Tell the participants that you will design a Table report that will list just the students who have allergies. Display transparency REPORT #10: REPORT PLANNING SHEET. Explain that this form helps you plan a report, and go over briefly.



REPORT PLANNING SHEET — REPORT #10 transparency

1. Put a check next to the type of report you want.
   - ____ QUICK SCREEN REPORT (prints whatever is on screen)
   - ____ QUICK LIST REPORT (prints whatever is on screen, but lines up the fields)
   - ____ QUICK TABLE REPORT (prints a table using as many fields as will fit across the page)
   - ____ CUSTOM TABLE REPORT (prints a table, but lets you choose which fields to print)
   - ____ CUSTOM PAGE REPORT (prints the screen, but lets you choose which fields to use and where to put them)
   - ____ CUSTOM TEXT REPORT (lets you use information in your fields together with words, underlines, carriage returns)
2. Do you want to print all of the records in the file? If not, which records do you want? _____
3. Do you want to print the records in their current browse order? If not:
   What field do you want to sort by? _____
   When the information in that field is the same, which field do you want to sort by? _____
4. Do you want to change any of the format options? _____
   _____
5. What heading do you want on the report? _____
6. For CUSTOM REPORTS only: Do you want to save the report format with your file? If yes, what name do you want to give it?
   _____ *(maximum 10 characters)*

5. Use transparency REPORT #11: PRINTING A CUSTOM TABLE REPORT to demonstrate designing and printing the table report. Cover up the points you haven't gotten to yet.

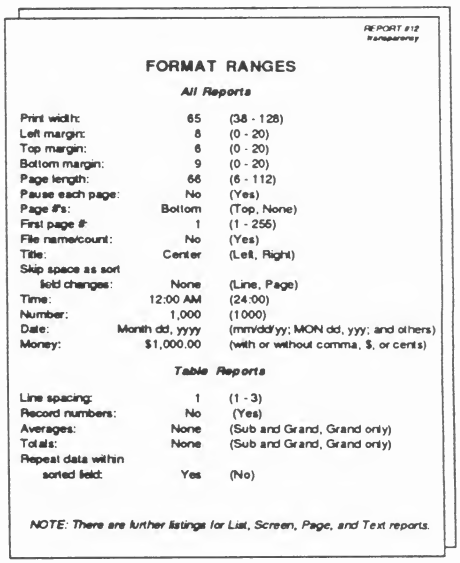


REPORT #11
transparency

PRINTING A CUSTOM TABLE REPORT

1. Select **CREATE A NEW REPORT.**
2. Select CUSTOM TABLE REPORT.
3. Choose N to print just a few records.
   - Create a selection sentence.
4. Choose N to **SORT** records.
   - Create a **SORT** sentence.
5. Choose Y to review format questions
6. Select fields for your report.
7. Type in title.
8. Choose Y to store report format.
   - Type in a name for the stored report format.
   - Choose Y to confirm.
9. Choose S to send report to screen.

   - At step 3, create this selection sentence: "Print every record where the **Allergies** field is not blank."
   - At step 4, create this sort sentence: "Sort the file by the **Last** field alphabetically a to z."
   - At step 5, place transparency REPORT #12: FORMAT RANGES on the overhead.
     - — Note the default figure of 65 for "Print width." Explain that different printers can handle different widths.
     - — Change "Line spacing" to "2."
     - — Press ⌘-RETURN (Ctrl-RETURN) when you are done.
     - — Press RETURN to continue.
     - — Return to transparency REPORT #11 to print the report.



REPORT #12
transparency

FORMAT RANGES

All Reports

Print width:	65	(38 - 128)
Left margin:	8	(0 - 20)
Top margin:	6	(0 - 20)
Bottom margin:	9	(0 - 20)
Page length:	66	(6 - 112)
Pause each page:	No	(Yes)
Page #'s:	Bottom	(Top, None)
First page #:	1	(1 - 255)
File name/count:	No	(Yes)
Title:	Center	(Left, Right)
Skip space as sort field changes:	None	(Line, Page)
Time:	12:00 AM	(24:00)
Number:	1,000	(1000)
Date:	Month dd, yyyy	(mm/dd/yy; MON dd, yyy; and others)
Money:	$1,000.00	(with or without comma, $, or cents)

Table Reports

Line spacing:	1	(1 - 3)
Record numbers:	No	(Yes)
Averages:	None	(Sub and Grand, Grand only)
Totals:	None	(Sub and Grand, Grand only)
Repeat data within sorted field:	Yes	(No)

NOTE: There are further listings for List, Screen, Page, and Text reports.

   - At step 6, select fields for your report, following these steps:
     - — Highlight **Last**. After pressing RETURN, press the right arrow key twice to add two more spaces. Note that the left arrow will delete spaces. Highlight MORE.
     - — Highlight **First**. After pressing RETURN, press the right arrow key twice to add two more spaces. Highlight MORE.
     - — Note the highlighted band in the middle of the screen. It tells how many characters have been used and how many are remaining.
     - — Highlight **Allergies** and choose STOP.
     - — Press RETURN if the format is OK.
   - At step 7, title your report "Students with Allergies."
   - Choose Y to store the report format.

— Note that it is not necessary to store the report format, but it does allow you to reuse and edit the report format easliy. For example, if more students were added to your class roster, you would use this format to print an updated report.

— Type in a name such as "Allergies" for the stored report format.

— Press RETURN to replace the STORED TABLE FORMAT: Substitute.

— Choose Y to indicate you are sure you want to do so.

- Choose S to send the report to the screen. Note that characters that go beyond 40 columns will not be seen on a 40 column screen. After sending the report to the screen, send it to the printer:

— Press Y to print report again.

— Choose P to send report to printer.

— Choose 2 to print 2 copies.

— Press RETURN when printer is ready.

— Hand out the 2 copies for participants to look out.

6. Summarize printing reports using transparency REPORT #1: REPORTS OVERVIEW, as in step 1.

- *Note:* If you have the time, you may want to include a lab where participants design and print their own reports in groups of 2-3.

Helpful Hints:

If participants need more information about reports or want to read more about it, they should check pages 22-43 in the *Bank Street School Filer* Reference Manual or pages 15-20 in the *Bank Street School Filer* Teacher's Guide.

They May Ask:

Q: Why don't we see the underlining for the text report on the screen?

A: The underlining is only seen when a text report using it is printed to paper. If it does not underline on paper, you may need to customize the *Bank Street School Filer* for your printer. This is done through the Utility Program on the *School Filer* disk. Choose DEFINE PRINTER COMMANDS, then type in the underline codes specified in your printer manual. (See p. 159 [157 in Commodore guide]) for some examples of printer codes.)

Q: Do I have to go all the way back to the beginning (main menu) if I make a mistake while creating a report?

A: No. Finish what you are doing and choose STOP. Then choose N for the question "IS THIS FORMAT OKAY?" (or "IS THIS SELECTION OKAY?", or "IS THIS SORT ORDER OKAY?") You can then press RETURN through your previous choices until you reach the place where you need to make a correction.

If you have gone past all these questions, continue as though you had not made a mistake, until you get to the question DO YOU WANT TO STORE THIS REPORT FORMAT WITH YOUR DATA (SO THAT IT WILL BE SAVED ON DISK WHEN YOU SAVE YOUR FILE). Then choose Y. Give it a name. Press ESC (⇐) and choose USE A STORED REPORT, and choose the report you just stored. You can now press RETURN through the report and make your corrections.

Q: Why does my report seem too big for the page? Why does it wrap around to the next line?

A: The number in the format question "Print width" is probably too large for your printer. For example, you may have chosen the number 80 when your printer can only print 72 characters across the page. You'll need to order the report again, typing Y to review the format questions. Change the print width to a number compatible with your printer.

Q: How do I get the COMMENT field to print?

A: The COMMENT field can be printed in List, Screen, and Page reports. As you create your report, type Y to review the format questions. Change the "Print comments" question to Yes.

Q: How can I get averages or totals?

A: Averages, subaverages, totals, and subtotals can be printed in Table reports. As you create your report, type Y to review the format questions. Change the "Averages" or "Totals" questions to "Sub and Grand" or "Grand only," depending on your need. Grand averages and totals can also be printed in List, Screen, and Page reports. As you create your report, type Y to review the format questions. Change the "Print averages/totals" question to Yes.

Q: How do I print a single record?

A: Press ⌘-P (Ctrl - P) to print the record on the screen.

ACTIVITY: VIDEOTAPE

OVERVIEW

Objective:

- To reinforce skills in using the *Bank Street School Filer.*
- To show participants examples of a teacher introducing students to the *School Filer* and students using the *School Filer* in the classroom.

Materials:

Sunburst Video: *Using Databases in the Classroom*

VCR and large screen projector

Preparation:

Make sure that the tape can be seen and heard clearly on your machine.

OUTLINE

	TIME	PAGE
1. Introduce the videotape.	1 minute	46
2. Show the video.	20 minutes	46
3. Discuss. • Reactions? • What did they learn? • Is it a useful tool? • Good way to introduce teachers to *School Filer*? • Note that it is available from Sunburst free on 30 day loan.	9 minutes	46

SCRIPT

1. Introduce the videotape.

2. Show the video.

3. Spend a few minutes after the video is over discussing it. Questions might include:

   What are your reactions?

   What did you learn from the video?

   Is this a useful tool? What parts were helpful?

   Is this a good way to introduce the *School Filer* to teachers?

- Note that the video is available from Sunburst in both VHS and Beta versions for free on a 30 day loan basis. During this time, teachers are encouraged to make as many copies as they need.

Helpful Hints:

There are several times when the teacher in the video refers to the "Open Apple" key (⌘). In fact, the Apple keys can be used interchangeably with the *School Filer*.

They May Ask:

Q: How can I order this tape?

A: Copies may be obtained by calling Sunburst at (800) 338-3457. Or call collect (914) 747-3310.

Sunburst Communications
101 Castleton Street
Pleasantville, N.Y. 10570

Note: participants will receive a RESOURCES handout at the end of the day. All of this information is included.

Q: What school and grade are being used on the video?

A: It is a 7th grade class from The Town School, New York City.

Q: Are there any obligations to buy the software if I order the video and copy it?

A: There is no obligation.

ACTIVITY: CREATING YOUR OWN DATABASE

OVERVIEW

Objective:

- To teach participants how to create a database.
- To model creating a database with a large group of students.
- To give participants the experience of planning and creating their own database in a small group.

Materials:

Software:

blank disk
initialized data disks (preferably one for each participant)
Bank Street School Filer

Handouts:

CREATE A: DATABASE PLANNING SHEET
CREATE B: DATABASE PROJECT CHECKLIST
CREATE C: GUIDE SHEET

Transparencies:

CREATE #1: DATABASE IDEAS
CREATE #2: CRITERIA IN SELECTING A TOPIC
CREATE #3: DATABASE PLANNING SHEET
CREATE #4: SUMMARY

Supplies:

writing materials (such as felt-tip markers, dry erase markers, or chalk)

Preparation:

1. Write the headings "Field Name," "Type," and "Description" on the board or overhead projector. Refer to CREATE #3: DATABASE PLANNING SHEET to see how these headings will be used in planning a database.
2. Boot the *School Filer* on each computer.
3. Be sure you have enough copies of CREATE A, B, and C for each participant.
4. Place transparencies next to the overhead projector in the order that you will need them.

OUTLINE

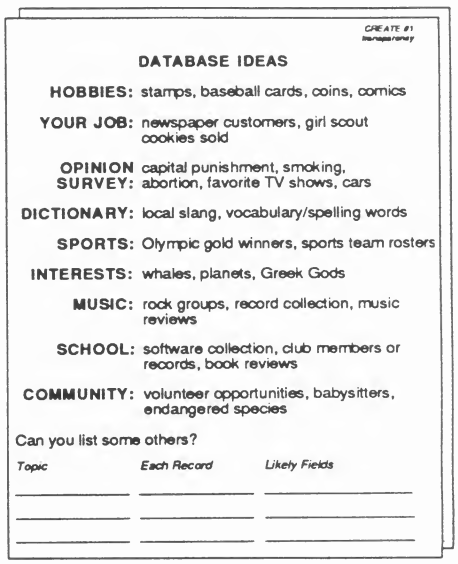
	TIME	PAGE
DEMO: 1. Introduce the activity. • Brainstorm for topics (use transparency CREATE #1: DATABASE IDEAS). • Evaluate topics (use transparency CREATE #2: CRITERIA IN SELECTING A TOPIC). • Vote to select one topic.	12 minutes	49
2. Plan the database. • Use transparency CREATE #3: DATABASE PLANNING SHEET. • Complete a Database Planning Sheet on the board.	5 minutes	50
3. Demonstrate how to begin creating the database. • Create the fields. • Move the fields. • If time permits, enter 2 sample records. • Initialize the data disk and save the file.	10 minutes	51
LAB: 1. Introduce the activity. • Distribute handout CREATE A: DATABASE PLANNING SHEET to help participants plan. • Distribute handouts CREATE B, C as direction sheets.	5 minutes	52
2. Divide participants into groups and begin work.	50 minutes	52
3. Discuss each group's database.	10 minutes	52
4. Discuss advantages of having students create their own databases.	5 minutes	52
5. Summarize creating a database. • Use transparency CREATE #4: SUMMARY.	3 minutes	52

SCRIPT

DEMO:

1. Tell participants that you will begin by creating a database together with the whole class. (Note that while the group won't actually complete the database, participants will experience some of the initial planning and problem solving that will be required of students if they create a large or small group database.) The first step is to choose a topic.

   - Ask participants to brainstorm topics for a database. Use transparency CREATE #1: DATABASE IDEAS to give them some ideas.
   - List the topics on the transparency.
   - Each time an idea is contributed, work with the participant to determine how it would fit into a database—what would each record describe? What are some likely fields? Fill in their responses on the board or directly on the transparency.
   - Tell participants that the next step is to evaluate each of the topics. Ask them to consider the points on transparency CREATE #2: CRITERIA IN SELECTING A TOPIC.



CREATE #1

DATABASE IDEAS

HOBBIES: stamps, baseball cards, coins, comics

YOUR JOB: newspaper customers, girl scout cookies sold

OPINION SURVEY: capital punishment, smoking, abortion, favorite TV shows, cars

DICTIONARY: local slang, vocabulary/spelling words

SPORTS: Olympic gold winners, sports team rosters

INTERESTS: whales, planets, Greek Gods

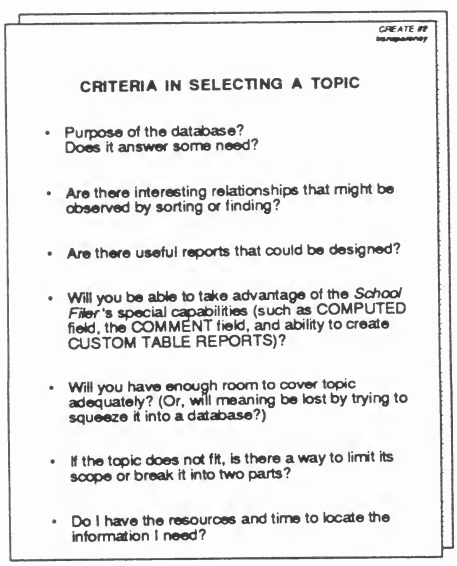
MUSIC: rock groups, record collection, music reviews

SCHOOL: software collection, club members or records, book reviews

COMMUNITY: volunteer opportunities, babysitters, endangered species

Can you list some others?

Topic	*Each Record*	*Likely Fields*



CREATE #2

CRITERIA IN SELECTING A TOPIC

- Purpose of the database? Does it answer some need?
- Are there interesting relationships that might be observed by sorting or finding?
- Are there useful reports that could be designed?
- Will you be able to take advantage of the *School Filer*'s special capabilities (such as COMPUTED field, the COMMENT field, and ability to create CUSTOM TABLE REPORTS)?
- Will you have enough room to cover topic adequately? (Or, will meaning be lost by trying to squeeze it into a database?)
- If the topic does not fit, is there a way to limit its scope or break it into two parts?
- Do I have the resources and time to locate the information I need?

- As you evaluate the topics, keep in mind the following space limitations:

  a. In general, a field can have up to 78 characters of text (about 1 line on the 80 column screen). The COMMENT field, however, can hold up to 255 characters. The highest number that can be entered in a NUMBER or MONEY field is 999,999,999.

  b. You may have up to 50 fields in a record, although it is unlikely that you will ever use that many. (Too many fields can be overwhelming and will limit the number of records that can fit in the file.) Most databases have between 10 and 20 fields.

  c. The number of records you can fit in a file depends on the number and the type of fields in each record. However, as a *general* guideline, a 64K file with about 20 fields can hold about 50 records. A 128K file can hold about 150 records.

  d. The absolute maximum number of records you can store in a 64K file is 255. For 128K, the maximum number of records is 512.

  e. If a topic does not seem to fit, there may be some way to limit its scope, or break it into two parts. For example, the 64K MAMMALS file from *Endangered Species Databases* is limited to endangered *mammals* only. Similarly, the 128K ANIMALS file from *Animal Life Databases* is available in two parts for 64K users—one file for warm-blooded animals, a second for cold-blooded animals.

- Have participants vote on each of the topics suggested. Narrow the topics down to three by selecting the top vote-getters. Then vote again to select a single database topic.

2. Place CREATE #3: DATABASE PLANNING SHEET on the overhead.

   - Given your topic, decide how you would complete the Database Planning Sheet. Ask the group to suggest Field Names, Types, and Descriptions (or examples). Record participants' responses on the board.

   - To save time, limit the database to about 10 fields.

   - Decide how you will use (or not use) the COMMENT field.

CREATE #3
transparency

DATABASE PLANNING SHEET

My topic is_____.

I will save my file using the name _____.
(8 characters or less)

Each record will describe one _____.

I will need approximately _____ records.

	Field Name (15 characters)	*Type* *	*Description*
1.			
2.			
3.			
4.			
5.			
6.			
7.			

The COMMENT field will be named:_____

It will contain:_____

*Field types: ANYTHING (A), NUMBER (#), MONEY ($), DATE (D), ZIP (Z), PHONE (P), TIME(T), COMPUTED (C)

3. Using the computer with the large monitor demonstrate how to begin creating the database using **CREATE FIELD**. Enter all of the fields on the database planning sheet. (Note that it is usually faster to wait until after you have entered one or two sample records before moving the fields on the screen.)

   - Choose **CHANGE FIELDS** and select MOVE SEVERAL FIELDS. Reposition one or more fields as necessary. Note that from **CHANGE FIELDS** it is also possible to delete fields, redefine a field (change its name, its data type, and its position) and rename the COMMENT field. Fields can be changed at any time—even after records have been entered. This process of planning, trying out, and revising the database design is a problem-solving activity.

   - If time permits, enter 2 sample records. Press Apple-S (Ctrl-S) (for Space) to find out how much space is used by the 2 records and estimate how many more records will fit in the file.

   - Demonstrate initializing a data disk and saving the database.

     a. To initialize, select **INIT** (**PREP**) from the OTHER MENU. Type Y, place the blank disk in the data disk drive, and type GO.

     b. To save the file, select **SAVE** (**SAVE FILE** on 80 column screen) from the OTHER MENU. Type N to the question "DO YOU WANT A CATALOG?". Type in the name of the file and press RETURN twice.

LAB:

1. Tell participants that they will now have an opportunity to create their own databases. Explain that you will ask them to break into groups of three or four.

   - Distribute handouts CREATE A, B, and C.
   - Direct participants' attention to the handouts. Suggest that they spend part of their time planning their file on paper (using CREATE A) before they begin.
   - Explain that CREATE B and C are examples of direction sheets which a teacher might distribute to students who were creating their own files.

2. Have the class break into their groups and begin working. Remind them that they will have nearly a full hour in which to plan the database, create the fields, and begin entering records.

   - Make yourself available to answer any questions that may come up while participants are working.
   - When the time is up, be sure that participants have a data disk on which to save their work and that all groups have saved their files correctly.

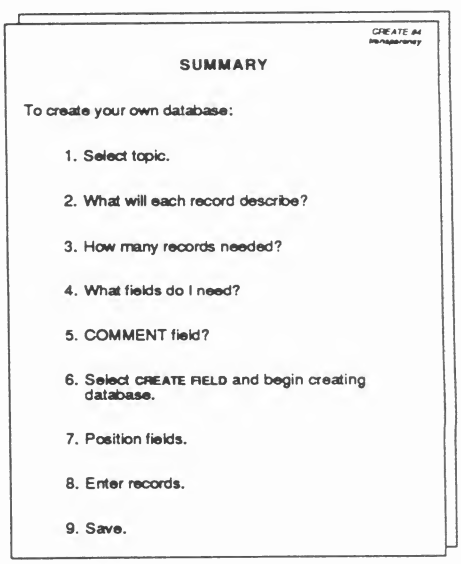
3. Ask each group to designate one member to tell the rest of the class:

   - what database you created
   - what problems were encountered and how you solved them
   - what changes you made to your original database design

4. Ask the class to suggest some of the advantages of having students create their own databases. These may include:

   - students practice group decision-making and information-organizing skills
   - students gain computer skills
   - students are more connected to the project since they've created it themselves
   - cooperation is encouraged through team work

5. Summarize creating a database using transparency CREATE #4: SUMMARY.



CREATE #4

SUMMARY

To create your own database:

1. Select topic.
2. What will each record describe?
3. How many records needed?
4. What fields do I need?
5. COMMENT field?
6. Select CREATE FIELD and begin creating database.
7. Position fields.
8. Enter records.
9. Save.

They May Ask:

Q: When would I save a file using the same name and when would I use a different name?

A: Saving a file with the same name erases the old one. You would do this when you want your updated file saved and you don't need the old one anymore. You would save a file using a different name when you want to have both the old version and the new.

Q: What is the purpose of passwords? How do they work?

A: Passwords are a way of keeping your data confidential. For example, you might assign a password to a file if you were using it to keep a diary. Once a password is assigned, you must use it each time you retrieve the file. Teachers can see a list of all passwords by choosing CATALOG DISKS on the *Classroom Tools Disk*. (See p. 79 in the *Bank Street School Filer* Teacher's Guide for more information.)

Q: Why is it important to specify a description or example for certain fields on the database planning sheet?

A: For certain fields, it's best to specify a limited number of choices to avoid inconsistent entries and errors in searching and sorting. For example, in a book reviews file, the terms "mystery," "mystery story," and "who-done-it" could all be applied to the same type of book. It would be important to specify one term as the standard and list all other acceptable responses (adventure, fantasy, etc.).

Q: Should I use **SAVE** or **SAVE FORM** to save my work?

A: You will almost always use **SAVE** (**SAVE FILE** in 80 columns). **SAVE FORM** saves just the fields (but not any of the data). Note that the presenter(s) will discuss these options in greater detail in the next lesson, Classroom Considerations.

Q: Why do I have so many blank records?

A: While in **ADD RECORD**, you may have pressed Apple-RETURN (Commodore-RETURN) more than once and created several blank records. Apple-D (Commodore-D) will delete the record currently on the screen.

ACTIVITY: CLASSROOM CONSIDERATIONS

OVERVIEW

Objective:

- To introduce participants to the Utility Program on the *Bank Street School Filer.*
- To introduce participants to the *Classroom Tools Disk.*
- To discuss effective classroom management, given particular computer resources.

Materials:

Software:
Classroom Tools Disk
Presenter's Data Disk
an initialized data disk (to create a Report Saving Disk—see *Preparation* below)
Bank Street School Filer (for Utility Program)

Transparencies:
CLASSROOM #1: UTILITY PROGRAM*
CLASSROOM #2: CLASSROOM TOOLS DISK*

Preparation:

If possible, attach a printer to the demonstration computer.

Ten of the files on the Presenter's Data Disk are reports saved to disk, not database files. All ten use students' names. You will use these reports in the demonstration of the *Classroom Tools Disk.* Make a separate disk containing only these report files. To make your Report Saving Disk, follow this procedure:

Boot the *Classroom Tools Disk*. Initialize (prepare) a blank disk using INITIALIZE DISKS (PREPARE DISKS).

Highlight COPY FILES from the main menu and press RETURN.

Place the Presenter's Data Disk in the drive and press RETURN.

Choose N to copy only certain files from the disk. Mark all the files with student's names:

KELLI	GABRIELA
JOHN.P	LAURIE
RYAN	JOANNA
JOHN.S	STEPHEN
LORENZO	EUGENE

Follow the rest of the prompts and copy these files to the disk you just initialized. Label the new disk "Report Saving Disk."

* There are two versions, Apple and Commodore. Be sure you have the correct one.

OUTLINE

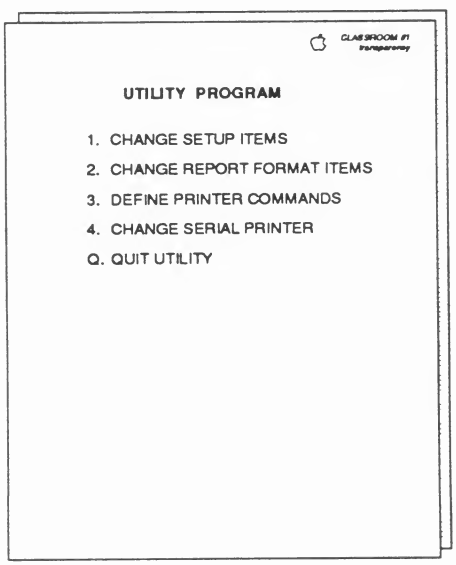
	TIME	PAGE
Utility Program: 1. Introduce Utility Program; discuss each option. • Use transparency CLASSROOM #1: UTILITY PROGRAM.	2 minutes	56
2. Select CHANGE SETUP ITEMS. • Demonstrate changing TIME to a 24-hr format. • Briefly review other options.	2 minutes	57
3. Discuss CHANGE REPORT FORMAT ITEMS.	2 minutes	57
4. Return to Main Menu and quit Utility Program.	.5 minutes	57
Classroom Tools Disk: 1. Go over each option on the menu. • Use transparency CLASSROOM #2: CLASSROOM TOOLS DISK.	2 minutes	58
2. Explain CATALOG DISK. • Use Presenter's Data Disk to illustrate.	2 minutes	58
3. Explain PRINT FILER REPORTS. • Use Report Saving Disk to illustrate.	2 minutes	58
4. Explain INITIALIZE DISKS (PREPARE DISKS) and COPY FILES. • Copy files from the Presenter's Data Disk to illustrate COPY FILES.	2 minutes	58
Classroom Management: 1. Discuss managing different computer configurations.	8 minutes	59
2. Discuss merge file feature.	2.5 minutes	59

SCRIPT

Utility Program

1. Tell participants that the Utility Program allows you to change certain program settings and options. Boot the *Bank Street School Filer* and press ESC (⇐) as the program is loading. Explain each of the options on the menu, following transparency CLASSROOM #1: UTILITY PROGRAM:

   - CHANGE SETUP ITEMS lets you customize how the *School Filer* works, prints, and appears on the screen.
   - CHANGE REPORT FORMAT ITEMS lets you determine the default values for the settings used when printing a report.
   - DEFINE PRINTER COMMANDS is used to tell the *School Filer* the commands your printer needs to start up and underline text.
   - CHANGE SERIAL PRINTER (Apple only) is used by the Apple IIc only if your printer requires special communications.
   - SETUP FOR RS-232 INTERFACE (Commodore only) is used if you are connecting a serial printer to the RS-232 Interface, rather than the standard Commodore serial bus connector.
   - QUIT UTILITY lets you leave the Utility Program and use the *School Filer.*



2. Select CHANGE SETUP ITEMS and demonstrate how to change TIME to a 24 hour format.

   - Select the item by pressing the appropriate letter.
   - Change the current value by pressing the left or right arrow keys.
   - When you have chosen a value, press RETURN.
   - When you are through changing the report format items, press the ESC (⇐) key.
   - Press N to cancel the changed values.
   - Press RETURN to go back to the list of setup items.

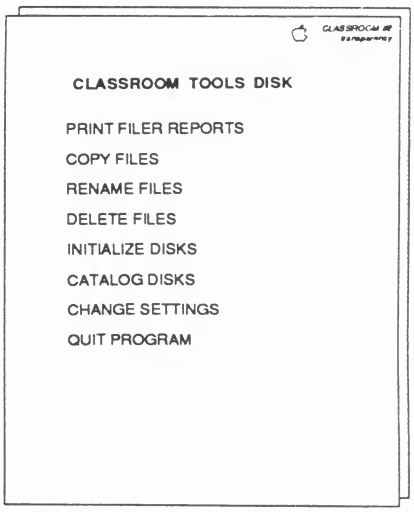
   Note that the 128K Apple version of the *School Filer* lets you choose either 40 or 80 column format for the screen display. Explain that whatever default is chosen here can be overridden by pressing the 4 key (for 40 column) or the 8 key (for 80 column) when the program is first loading.

   Briefly review the other items, looking particularly at any that the participants request. (The *Bank Street School Filer* Reference Manual has a comprehensive section on the Utility Program beginning on p. 83 if you have questions about any of the items.)

3. ESC (⇐) back to the main menu and select CHANGE REPORT FORMAT ITEMS.

   - Explain that participants can change a report's format anytime within the *School Filer* by choosing Y to review the format questions as they are setting up the report. However, they can change the default settings using this section of the Utility Program.
   - Note that the TIME, NUMBER, MONEY, and DATE formats for reports can be set here without affecting how they will be displayed on the screen. (You would choose CHANGE SETUP ITEMS to change the screen display.)
   - Briefly review the other items, looking particularly at any that the participants request.

4. ESC (⇐) back to the main menu. Choose Q to quit the Utility Program.



Classroom Tools Disk

1. Boot the *Classroom Tools Disk*. Explain that the *Tools Disk* contains special teacher aids, designed to make using the *School Filer* in classroom settings even easier. Briefly go over the menu following transparency CLASSROOM #2.

2. Highlight CATALOG DISKS and press RETURN.

   - Explain that this will help keep track of disks in the classroom. It gives a listing of all database files and reports saved on data disks as well as any passwords attached to particular files.
   - Place the Presenter's Data Disk in the drive and press RETURN.
   - Explain that teachers can use this option to print an alphabetized catalog of files which they can tape onto each disk jacket for quick reference.

3. ESC (⇐) to the main menu. Select PRINT FILER REPORTS, press RETURN.

   - Hold up the Report Saving Disk you have made and ask participants to suppose that their students had saved their reports on this disk. They did so by choosing D when they saw the question "SEND REPORT TO PRINTER, DISK FILE, OR SCREEN (P/D/S)?" as they created their reports. They chose Y when asked whether to include page formatting. (For more information on this process, see the *Bank Street School Filer* Teacher's Guide, p. 77-78.)
   - Explain that the PRINT FILER REPORTS tool is designed for classrooms where there are more computers than printers. It saves time by letting teachers print out all of their students' reports at once.
   - Put the Report Saving Disk in the disk drive and press RETURN.
   - Choose Y to print all the reports in the order shown. Note that you could choose to print only specific reports and put them in any order.
   - Press ESC (⇐) when the following statement appears: CHECK PRINTER THEN PRESS RETURN.

4. Tell participants there are several tools on the *Classroom Tools Disk* that do things in bulk. Two are INITIALIZE DISKS (PREPARE DISKS) and COPY FILES. With them, you can initialize disks or copy a lot of data files very quickly.

   - ESC (⇐) to the main menu and highlight COPY FILES. Then press RETURN. Note that COPY FILES works best if you have two disk drives, but it can also be used with just one.
   - Insert the Presenter's Data Disk into the drive and press RETURN.
   - Demonstrate selecting several files to copy and adjusting the order they will appear on the new disk. Press ESC (⇐) to stop before files are actually copied.

Classroom Management

1. Discuss managing different computer configurations in the classroom and lab. Have participants share their own situations, problems, and solutions. For background information, see Chapter Five, Classroom Considerations, of the *School Filer* Teacher's Guide.

2. Be sure to note that one useful feature of the *School Filer* is the ability to merge files. This is important if students are creating a whole-class database and you want to make use of a computer lab.

   - Using the same file, you can select **RETRIEVE FORM** on each computer. After students have entered and edited their records, you would save each file using different names.

   - As long as no change is made to the fields (including moving them around on the screen), you can then merge the students' files by retrieving one after the other. You would select **RETRIEVE FILE** and choose N in response to the question "DO YOU WANT TO CLEAR DATA BEFORE RETRIEVING NEW FILE (Y/N)?"

Helpful Hints:

It's a good idea to tailor this demonstration to the needs and interests of your participants. Try not to exceed the allotted time. Remember that your participants have spent a full day thinking about new ideas and concepts.

They May Ask:

Q: When do you use **SAVE FORM**?

A: You probably won't use **SAVE FORM** very often. If you have a lot of records in a file and you want to delete them all you can select **SAVE FORM** to save just the field names, but not any of the information in the fields.

Q: What is the difference between printing a report to disk and saving a stored report format?

A: It is easy to confuse reports and report formats. A report format is like a recipe for creating a report. It specifies what type of report to use (a TABLE REPORT, for example), how the records should be sorted, which fields should be included, and so on.

You can store up to 3 report formats with a file and use them over and over, even if you change the data in your file.

The report itself is the end product. It's what you print on paper, or to the screen, or save on the disk as a text file.

ACTIVITY: CONCLUSIONS

OVERVIEW

Objective:

- To summarize the benefits of using databases with students.
- To provide additional sources of information about using databases in the classroom.
- To have participants fill out the evaluation sheet.

Materials:

Supplies:

large envelope
writing materials (such as felt-tip markers, dry erase markers, or chalk)

Handouts:

CONCLUSIONS A: SUGGESTED READING LIST
CONCLUSIONS B: RESOURCES
CONCLUSIONS C: EVALUATION

Transparencies:

CONCLUSIONS #1: SUMMARY

Preparation:

Make enough copies of handouts CONCLUSIONS A, B and C for each participant.

Place large envelope out on a table.

OUTLINE

	TIME	PAGE
1. Discuss "Why use databases in the classroom?" • List responses on the board.	3 minutes	62
2. Summarize workshop emphasizing that databases build on problem-solving skills. • Use transparency CONCLUSIONS #1: SUMMARY.	3 minutes	62
3. Distribute handout CONCLUSIONS A: SUGGESTED READING LIST and discuss.	1 minute	62
4. Distribute handout CONCLUSIONS B: RESOURCES and discuss.	1 minute	62
5. Distribute handout CONCLUSIONS C: EVALUATION and have participants fill out.	2 minutes	63
6. Thank participants as you say goodbye.	will vary	63

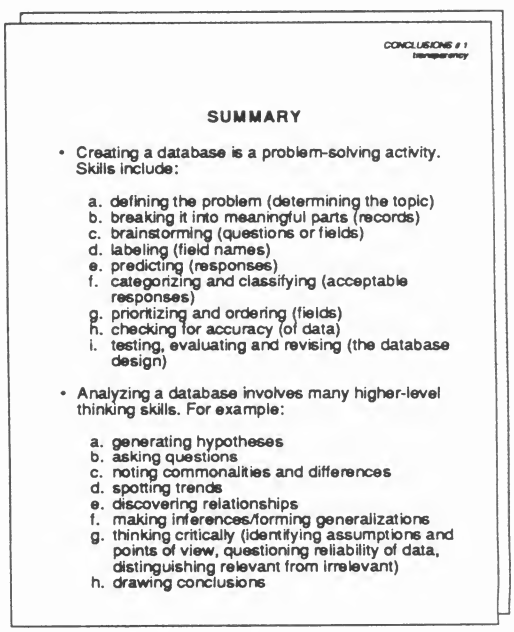
SCRIPT

1. Based on what they have experienced in the workshop, and drawing on classroom experience, ask participants to help you answer the question, "Why use databases in the classroom?"

   List responses on the board. If an important idea is left out, suggest it yourself. Responses may include:

   - Using databases introduces students to an important real-world application of computers (as do word processing, spreadsheets and graphics).
   - Databases are a tool for the information age; locating, organizing, analyzing and evaluating information are important literacy skills.
   - Creating a database gives students an opportunity to research a topic of interest—to collect and organize information.
   - Databases provide a means for class members to work together, to pool resources and share information.
   - Databases can work to enrich and enliven school subject areas.
   - Prepared (or premade) databases can help students discover relationships in a way that textbooks and other reference materials alone cannot.
   - Prepared databases also serve as models of carefully planned and researched files.

2. As a summary of the workshop, emphasize that working with databases helps develop crucial problem-solving skills. Refer to transparency CONCLUSIONS #1: SUMMARY.


CONCLUSIONS # 1
transparency

SUMMARY

- Creating a database is a problem-solving activity. Skills include:
  a. defining the problem (determining the topic)
  b. breaking it into meaningful parts (records)
  c. brainstorming (questions or fields)
  d. labeling (field names)
  e. predicting (responses)
  f. categorizing and classifying (acceptable responses)
  g. prioritizing and ordering (fields)
  h. checking for accuracy (of data)
  i. testing, evaluating and revising (the database design)
- Analyzing a database involves many higher-level thinking skills. For example:
  a. generating hypotheses
  b. asking questions
  c. noting commonalities and differences
  d. spotting trends
  e. discovering relationships
  f. making inferences/forming generalizations
  g. thinking critically (identifying assumptions and points of view, questioning reliability of data, distinguishing relevant from irrelevant)
  h. drawing conclusions

3. Distribute handout CONCLUSIONS A: SUGGESTED READING LIST. Encourage participants to use the Suggested Reading List to learn more about using databases in education. The asterisks refer to the articles or documentation dealing specifically with the *Bank Street School Filer.*

4. Distribute handout CONCLUSIONS B: RESOURCES. Tell participants that all Sunburst database software is listed on the sheet as well as information about the videotape.

5. Distribute the handout CONCLUSIONS C: EVALUATION.

   - Ask participants to take a few minutes to complete the workshop evaluation.
   - Have them place the evaluations in the large envelope when they are finished.

6. Thank participants for their enthusiasm and collaboration. As you say goodbye, they may appreciate knowing your phone number or address in case they have any questions as they start using databases.

For the presenter only:

After reviewing the evaluations, make a copy of each one. If you send in copies of the evaluation and a list of the participants' names and addresses, Sunburst will be able to help you and your district as you use computers for education and enjoyment. Your feedback will also help improve the design of future workshop handbooks.

Send to:

Bank Street School Filer Workshop Evaluation
Sunburst Communications
101 Castleton Street
Pleasantville, N.Y. 10570

Helpful Hints:

You may be able to help participants generate ideas in #2 on the Evaluation handout (CONCLUSIONS C) by suggesting major categories of use—creating a database, analyzing a database, using a prepared database, etc.

BANK STREET SCHOOL FILER WORKSHOP SURVEY

Yes, I plan to attend the Bank Street School Filer Workshop.

Name: _____

School or Office: _____

Address: _____

Telephone: _____

Grade Level: _____

Type of Students (check as many as apply):

Regular Classroom _____
Gifted and Talented _____
Special Education _____
Chapter 1 _____
Bilingual Program _____
Vocational Education _____
Other (Please specify) _____

Subjects taught/responsible for supervising:

_____

_____

_____

Please rate your computer experience:

Beginner		Competent/Comfortable		Expert
1	2	3	4	5

Please rate your database experience:

Beginner		Competent/Comfortable		Expert
1	2	3	4	5

AGENDA

9:00 LOG-IN
Enter a record in a CLASS database as you arrive.

9:15 INTRODUCTIONS
Introduce presenter, participants and workshop objectives.

9:30 WHAT IS A DATABASE?
Demo: Discuss what a database is, its importance, and its components. Learn basic database operations of **FIND** and **SORT** using CLASS file.

Lab: Practice **FIND** and **SORT**.

10:30 BREAK

10:45 USING PREPARED DATABASES
Demo: Learn how to use prepared databases in the curriculum to develop inquiry skills.

Lab: Try out databases prepared for use with the *School Filer.*

12:00 PRINTING REPORTS
Learn how to order reports.

12:30 VIDEOTAPE
View and discuss teacher-training videotape.

1:00 LUNCH

1:45 CREATING YOUR OWN DATABASE
Demo: Learn how to plan and create a database.

Lab: Work in small groups to create your own database.

3:25 CLASSROOM CONSIDERATIONS
Learn and discuss classroom management techniques.

3:50 CONCLUSIONS
Discuss reasons to use databases, give participants additional sources, and have them fill out evaluation.

ASSIGNMENT

Letter # 1

Dear CLIMATE FINDERS:

I am interested in using your service for all my travel needs. Therefore, I would like some background information on your agency.

Do you have any stations where it is warmer in January than in July? How many? Where are most of them located?

Which three stations are farthest from the equator?

I am a very busy executive, so I'd appreciate your earliest reply.

Yours Truly,

Priscilla Price

Letter # 2

Dear CLIMATE FINDERS:

I do hope you can help me. I am planning a trip around the world with my pet gila monster, Charles. I imagine that in traveling around the world together, we are likely to run into some rather chilly weather. The problem is that Charles, who is very dear to my heart, is also a reptile and a cold-blooded animal. He simply can not survive in temperatures below freezing. Is it possible to travel only to places where it has never been below freezing? Please check the record low temperature because I can not afford to take any chances with my dear friend.

Please tell me how many places in your database you locate. Are any of these places outside of the tropics?

Thanks Awfully,

Dame Elizabeth Dimwittle

Letter # 3

Dear CLIMATE FINDERS:

My advertising agency represents a well-known popsicle maker and I've just dreamed up the perfect ad campaign for their product, Fruity Pops. You see, Fruity Pops sell great in the summer, but sales really drop off in the fall and winter. Winter especially! People feel like, when the weather is cold, what do they need with frozen juice? But we have to convince them that they're wrong. Fruity Pops taste great in all weather!

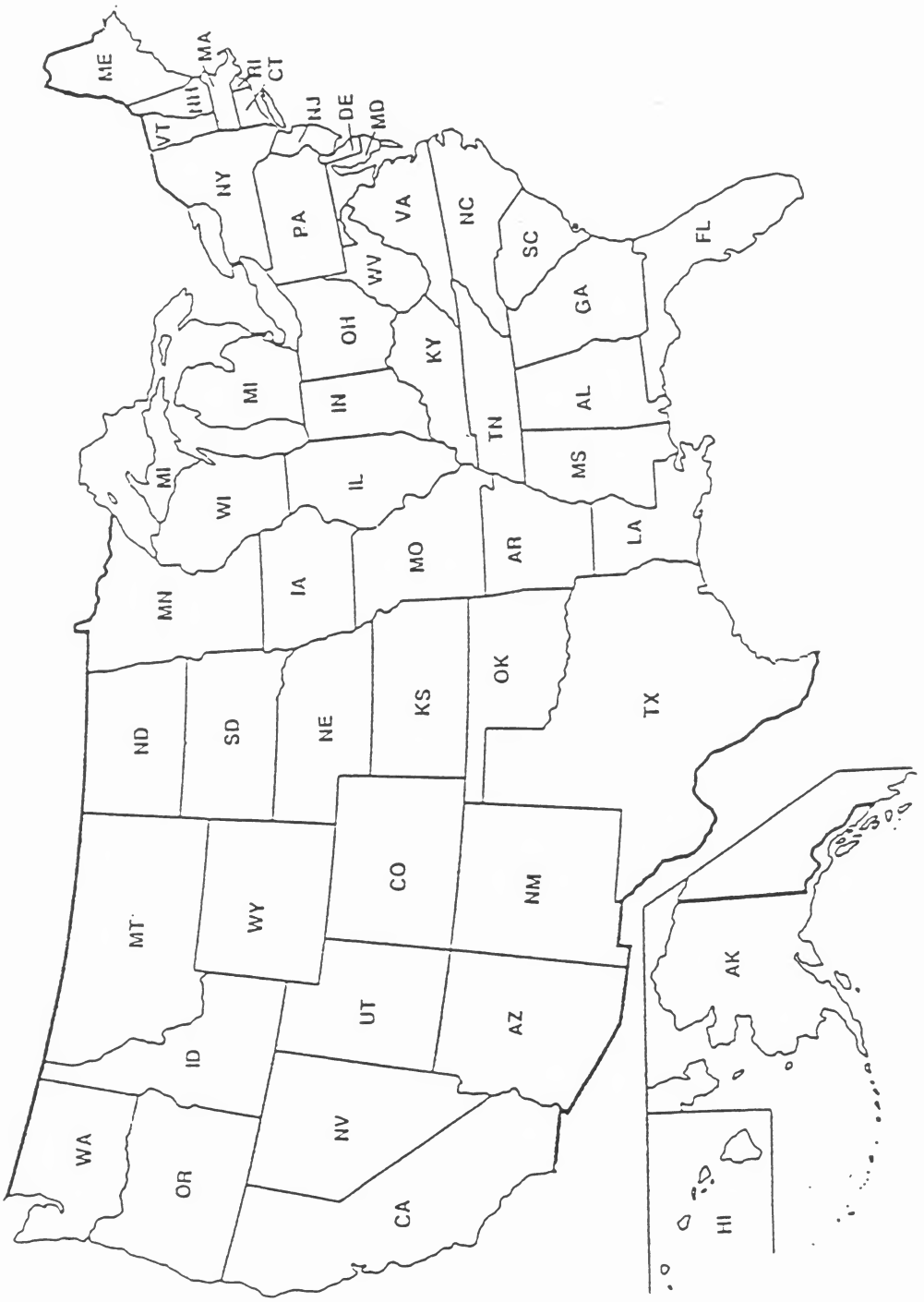
My idea is to take a television camera to places where it does not get above freezing (I mean all year round) and show people eating Fruity Pops with big smiles on their faces. Based on your database, what places can you recommend?

Get back to me right away because we're ready to move on this one.

Ciao Baby,

Stanley Slicktalker

UNITED STATES DENSITY MAP



Density of States in US

- ☐ 200 - 1000 people per square mile
- ☐ 100 - 199
- ☐ 50 - 99
- ☐ 10 - 49
- ☐ 0 - 9

SUNBURST DATABASES AND SCHOOL FILER SAMPLE FILES

Science Files

ANIMALS *(Animal Life)* - 128K only
    WARM *(Animal Life)* - 64K
    COLD *(Animal Life)* - 64K
    Note: WARM and COLD together are the same as ANIMALS
PETS *(Animal Life)*
* LAB *(Animal Life)*
PLANETS *(Astronomy)*
LOG *(Astronomy)*
* CONSTELL *(Astronomy)*
WORLD *(Climate and Weather)*
USA *(Climate and Weather)*
* WEATHER *(Climate and Weather)*
MAMMALS *(Endangered Species)*
CRITICAL *(Endangered Species)*
EXTINCT *(Endangered Species)*
* LOCAL *(Endangered Species)*
MISSIONS *(Space)*
LAUNCHES *(Space)*
DINOSAUR (*School Filer* sample file)
WHALES (*School Filer* sample file)

Social Studies and History

TIMELINE *(Astronomy)* - 128K only
    PRE-1800 *(Astronomy)* - 64K
    POST1800 *(Astronomy)* - 64K
    Note: PRE-1800 and POST1800 together are the same as TIMELINE
ATLAS *(North America)*
CANADA *(North America)*
* NEWS *(North America)*
FOOD *(North America)*
TIMELINE *(Space)*
* SURVEY *(Space)*
GENERAL *(United States)*
ECONOMY *(United States)*
CLIMATE *(United States)*
* PERSONAL *(United States)*
SIGNERS (*School Filer* sample file)
STATES (*School Filer* sample file)
OLYMPICS (*School Filer* sample file)

* Databases that students research and build.

Language Arts Files

BOOKS (all except *Climate and Weather)*
GLOSSARY (all except *Climate and Weather)*
REVIEWS (*School Filer* sample file)
SOURCES (*School Filer* sample file)

Math Files

FINANCE (*School Filer* sample file)
MILEAGE (*School Filer* sample file)

Student Tools

ADDRESS (*School Filer* sample file)
BASEBALL (*School Filer* sample file)
COINS (*School Filer* sample file)
FINANCE (*School Filer* sample file)
OUR FILE (*School Filer* sample file)
WANT ADS (*School Filer* sample file)

Adult Tools

CHILDREN (*School Filer* sample file)
EATS (*School Filer* sample file)
EQUIP (*School Filer* sample file)
JOBS (*School Filer* sample file)
MAGAZINE (*School Filer* sample file)
MILEAGE (*School Filer* sample file)
MUSIC (*School Filer* sample file)
OVERDUE (*School Filer* sample file)
SOFTWARE (*School Filer* sample file)
SPEC ED (*School Filer* sample file)
SP EVENT (*School Filer* sample file)
STUDENTS (*School Filer* sample file)
SWIMBEST (*School Filer* sample file)
TEACHERS (*School Filer* sample file)

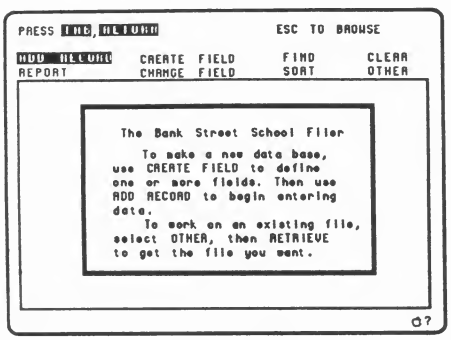
NOTE: All files are 64K unless marked otherwise.

Appendix E (p. 160-166) in the *Bank Street School Filer* Teacher's Guide contains a brief explanation for each of the *School Filer* sample files.

BANK STREET SCHOOL FILER

Quick Reference/Quick Start Card

MAIN MENU OPTIONS


PRESS TAB, RETURN
ESC TO BROWSE
ADD RECORD
REPORT
CREATE FIELD
CHANGE FIELD
FIND
SORT
CLEAR
OTHER
The Bank Street School Filer
To make a new data base, use CREATE FIELD to define one or more fields. Then use ADD RECORD to begin entering data.
To work on an existing file, select OTHER, then RETRIEVE to get the file you want.
⌘?

ADD RECORD	Lets you enter data into new records in a database file.
REPORT	Lets you print a report on paper (if you have a printer) or on the screen.
CREATE FIELD	Lets you create the categories of information that make up a database form.
CHANGE FIELD	Lets you redefine, delete, or move fields.
FIND	Lets you select specific records according to criteria you specify.
SORT	Lets you change the order in which your records appear.
CLEAR	Lets you erase all or some of your records.
OTHER	Lets you go to the Other Menu, which contains options for retrieving files from disk, saving files to disk, and for doing "housekeeping" tasks on your data disks.
BROWSE	Lets you review and update your records. Accessed by pressing **ESC** from the Main Menu.

SPECIAL COMMANDS

⌘-B Moves the cursor to the first field in a record. ⌘-B will also reset the screen display to the upper left-hand corner of the record "page."

⌘-E Moves the cursor to the last field in a record. If the comment display is on, the COMMENT field is considered the last field in a record.

⌘ ← Moves the cursor backward to the previous record. Not available in **ADD RECORD**. In **FIND**, backward to the previous selected record.

⌘ → Moves the cursor forward to the next record. Not available in **ADD RECORD**. In **FIND**, forward to the next selected record.

⌘ < Moves the cursor backward through ten records. Not available in **ADD RECORD**. In **FIND**, backward through ten selected records.

⌘ > Moves the cursor forward through ten records. Not available in **ADD RECORD**. In **FIND**, forward through ten selected records.

⌘-C Turns the display of the COMMENT field on and off.

⌘-D Deletes the record currently displayed on the screen.

⌘-R Copies the data from the same field in the previous record into the displayed record. Use ⌘-R to conveniently repeat data, such as the date from the previous DATE field. In **FIND**, copies the data from the previous selected record.

⌘-S Displays how much of the computer's memory the current data is occupying. In **FIND**, ⌘-S will also display the current selection sentence.

⌘-P Prints a single record as it appears on the screen. ⌘-P will also print a copy of a selection or sort sentence if pressed when you are asked if the sentence is okay.

⌘= (128K version only) Permits you to use the *Bank Street School Filer*'s built-in calculator. Change the format in which the calculator's results are displayed by pressing the D key to select dollar format ($), integers only (I), or unformatted.

⌘? Displays a list of special commands and instructions when the ⌘? appears in the lower right corner of the screen.

ESC Cancels the current operation. **ESC** will let you use **BROWSE** when pressed while the Main Menu is displayed.

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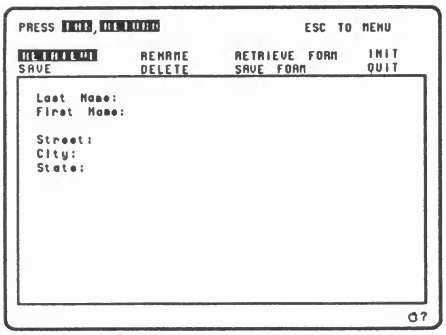
101 Castleton Street
Pleasantville, NY 10570

Call toll-free (800) 338-3457
Or call collect (914) 747-3310

OTHER MENU OPTIONS



RETRIEVE	Loads the contents of a database file from a disk into the computer's memory.
SAVE	Saves all or some of the records in a database file onto a disk.
RENAME	Changes the name of a database file on a disk.
DELETE	Deletes a database file from a disk.
RETRIEVE FORM	Loads just a database form (field names, data types, and positions) without the associated data into the computer's memory.
SAVE FORM	Saves just the database form (field names, data types, and positions) onto a disk.
INIT	Prepares (initializes) a disk to use as a data disk.
QUIT	Lets you stop using the *Bank Street School Filer* and start up another program.

UTILITY PROGRAM

Access the Utility Program by pressing **ESC** while first starting the program and the *Bank Street School Filer* title screen is displayed.

CHANGE SETUP ITEMS
: These items determine how the program will display on the screen and work with the disk drive(s) and printer.

CHANGE REPORT FORMAT ITEMS
: These items determine the default format settings for reports, including overall page format, field formats, and specific settings for table, page, and text format reports.

DEFINE PRINTER COMMANDS
: Use this option to define a printer setup command and the printer commands to use underlined characters.

CHANGE SERIAL PRINTER
: Use this option if you are using a serial printer that requires special settings to communicate with the Apple IIc.

QUICK START INSTRUCTIONS

The *Bank Street School Filer* permits you to create a database in a simple, straightforward manner and gives you quick access to your information. Since there is a standard, or default, response for most options, it is possible to start using the *Bank Street School Filer* without first learning all about the program.

To illustrate how to create and use a database, we will create a simple database file of names and addresses. Remember: if you are not sure about what to answer, you can usually just press **RETURN** to accept the default response.

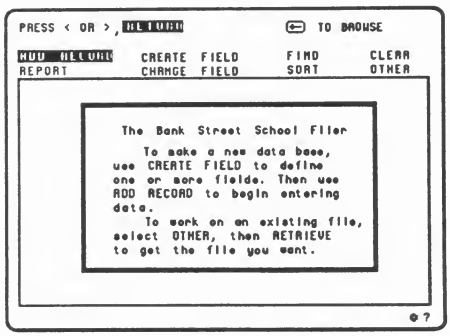
1. Start at the Main Menu. Use the **TAB** or right arrow key to highlight **CREATE FIELD**, and press **RETURN** to begin creating fields.
2. A list of data types will appear; press **RETURN** to accept the first data type (ANYTHING).
3. Name the first field by typing "Last Name" and pressing **RETURN**.
4. When asked to position the field, again press **RETURN** to leave it where it is.
5. Again the list of data types will appear. Once more press **RETURN** to choose the ANYTHING data type.
6. Type in the field name "First Name" and press **RETURN**. Add three more fields by repeating steps 2-4: Street, City, and State.
7. When you are done creating fields, press **ESC** to go back to the Main Menu.
8. Begin adding data by highlighting the **ADD RECORD** option on the Main Menu and pressing **RETURN**. Type in names, addresses, etc. After each piece of data you enter, press **RETURN**.
9. When you have entered one complete name and address record, hold the ♁ key down and press **RETURN** to add the entire name and address record to your file; then enter data into the next record and press ♁-**RETURN** again.
10. Keep adding names and addresses until you have six or more records; then press **ESC** to go back to the Main Menu. You have created a database!
11. Print out a report of your data as follows: First make sure your printer is connected and turned on. From the Main Menu, press the **SPACEBAR** or the down arrow key to highlight **REPORT** and then press **RETURN**. You will be given a series of choices about type of report, sort order of the data, etc. Just keep pressing **RETURN** to accept the default answers to each question. This will create a table listing data from all your records.

That's it! You can now save your database file, add to it, edit it, or print it out in other report formats. You've taken the first step. You've created a database, and you now know how to use a data management program.

BANK STREET SCHOOL FILER

Quick Reference/Quick Start Card

MAIN MENU OPTIONS


PRESS < OR >, RETURN
TO BROWSE
ADD RECORD
REPORT
CREATE FIELD
CHANGE FIELD
FIND
SORT
CLEAR
OTHER
The Bank Street School Filer
To make a new data base, use CREATE FIELD to define one or more fields. Then use ADD RECORD to begin entering data.
To work on an existing file, select OTHER, then RETRIEVE to get the file you want.
⌘?

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FIND	Lets you select specific records according to criteria you specify.
SORT	Lets you change the order in which your records appear.
CLEAR	Lets you erase all or some of your records.
OTHER	Lets you go to the Other Menu, which contains options for retrieving files from disk, saving files to disk, and for doing "housekeeping" tasks on your data disks.
BROWSE	Lets you review and update your records. Accessed by pressing ⏎ from the Main Menu.

SPECIAL COMMANDS

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⌘->	Moves the cursor forward to the next record. Not available in ADD RECORD. In FIND, forward to the next selected record.
⌘-	Moves the cursor backward through ten records. Not available in ADD RECORD. In FIND, backward through ten selected records.
⌘-+	Moves the cursor forward through ten records. Not available in ADD RECORD. In FIND, forward through ten selected records.
⌘-C	Turns the display of the COMMENT field on and off.
⌘-D	Deletes the record currently displayed on the screen.
⌘-R	Copies the data from the same field in the previous record into the displayed record. Use ⌘-R to conveniently repeat data, such as the date from the previous DATE field. In FIND, copies the data from the previous selected record.
⌘-S	Displays how much of the computer's memory the current data is occupying. In FIND, ⌘-S will also display the current selection sentence.
⌘-P	Prints a single record as it appears on the screen. Pressing ⌘-P will also print a copy of the selection sentence when the *Bank Street School Filer* asks if the selection is okay. You will be prompted to check the printer to make sure it is on and ready to print.
⌘?	Displays a list of special commands and instructions when the ⌘? appears in the lower right corner of the screen.
⏎	Cancels the current operation. ⏎ will let you use BROWSE when pressed while the Main Menu is displayed.

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Pleasantville, NY 10570

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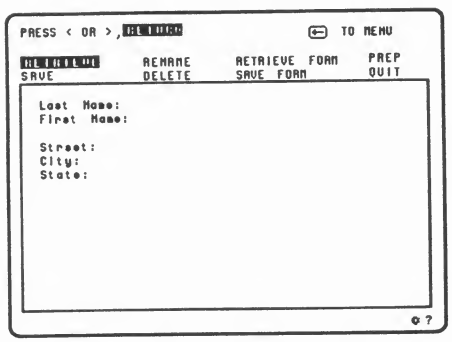
Or call collect (914) 747-3310

OTHER MENU OPTIONS



RETRIEVE	Loads the contents of a database file from a disk into the computer's memory.
SAVE	Saves all or some of the records in a database file onto a disk.
RENAME	Changes the name of a database file on a disk.
DELETE	Deletes a database file from a disk.
RETRIEVE FORM	Loads just a database form (field names, data types, and positions) without the associated data into the computer's memory.
SAVE FORM	Saves just the database form (field names, data types, and positions) onto a disk.
PREP	Prepares (formats) a disk to use as a data disk.
QUIT	Lets you stop using the *Bank Street School Filer* and start up another program.

UTILITY PROGRAM

Access the Utility Program by pressing ⏎ while first starting the program and the *Bank Street School Filer* title screen is displayed.

CHANGE SETUP ITEMS
These items determine how the program will display on the screen and work with the disk drive(s) and printer.

CHANGE REPORT FORMAT ITEMS
These items determine the default format settings for reports, including overall page format, field formats, and specific settings for table, page, and text format reports.

DEFINE PRINTER COMMANDS
Use this option to define a printer setup command and the printer commands to use underlined characters.

SETUP FOR RS-232 INTERFACE
Use this option if you are using a printer connected to the RS-232 Interface on the Commodore.

QUIT UTILITY
Select this option to leave the Utility Program and to start using the *Bank Street School Filer*.

QUICK START INSTRUCTIONS

The *Bank Street School Filer* permits you to create a database in a simple, straightforward manner and gives you quick access to your information. Since there is a standard, or default, response for most options, it is possible to start using the *Bank Street School Filer* without first learning all about the program.

To illustrate how to create and use a database, we will create a simple database file of names and addresses. Remember: if you are not sure about what to answer, you can usually just press **RETURN** to accept the default response.

1. Start at the Main Menu. Use the > or] key to highlight **CREATE FIELD**, and press **RETURN** to begin creating fields.
2. A list of data types will appear; press **RETURN** to accept the first data type (ANYTHING).
3. Name the first field by typing "Last Name" and pressing **RETURN**.
4. When asked to position the field, again press **RETURN** to leave it where it is.
5. Again the list of data types will appear. Once more press **RETURN** to choose the ANYTHING data type.
6. Type in the field name "First Name" and press **RETURN**. Add three more fields by repeating steps 2-4: Street, City, and State.
7. When you are done creating fields, press ⏎ to go back to the Main Menu.
8. Begin adding data by highlighting the **ADD RECORD** option on the Main Menu and pressing **RETURN**. Type in names, addresses, etc. After each piece of data you enter, press **RETURN**.
9. When you have entered one complete name and address record, hold the **C=** key down and press **RETURN** to add the entire name and address record to your file; then enter data into the next record and press **C=-RETURN** again.
10. Keep adding names and addresses until you have six or more records; then press ⏎ to go back to the Main Menu. You have created a database!
11. Print out a report of your data as follows: First make sure your printer is connected and turned on. From the Main Menu, press the **SPACEBAR** or the down arrow key to highlight **REPORT** and then press **RETURN**. You will be given a series of choices about type of report, sort order of the data, etc. Just keep pressing **RETURN** to accept the default answers to each question. This will create a table listing data from all your records.

That's it! You can now save your database file, add to it, edit it, or print it out in other report formats. You've taken the first step. You've created a database, and you now know how to use a data management program.

DATABASE PLANNING SHEET

My topic is_____.

I will save my file using the name _____.
(8 characters or less)

Each record will describe one _____.

I will need approximately _____ records.

	Field Name (15 characters)	*Type **	*Description*
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____

The COMMENT field will be named:_____

It will contain:_____

*Field types: ANYTHING (A), NUMBER (#), MONEY ($), DATE (D), ZIP (Z), PHONE (P), TIME(T), COMPUTED (C)

DATABASE PROJECT CHECKLIST

1. Plan your file by filling out a *Database Planning Sheet*.

2. Create the file.

3. Enter a few sample records.

4. Revise the file if necessary.

5. Revise the *Database Planning Sheet* OR print out a *Quick Blank Form* and add descriptions of fields that need them.

6. Decide how to divide up the work.

7. Collect the information you need.

8. Enter it in the computer.

9. Check the records for accuracy (including spelling).

10. Create two useful reports. (Be sure to write your name on the report.)

11. Write a paragraph describing what you learned from this project. (Include what went wrong, what went right, and what you'd do differently next time.)

12. Develop a *Guide Sheet* for others to use when exploring your file.

GUIDE SHEET

File Name: _____

Disk Name: _____

Created By: _____

****

Questions to Answer and Problems to Solve Using FIND and SORT

1. _____

   _____

2. _____

   _____

3. _____

   _____

4. _____

   _____

5. _____

   _____

6. _____

   _____

7. _____

   _____

SUGGESTED READING LIST

Books:

Cannings, Terence, and Brown, Stephen, ed. *The Information Age Classroom.* Irvine: Franklin, Beedle, and Assoc., 1986.

Cohen, Dorothy H. *The Learning Child: Guidelines for Parents and Teachers.* New York: Vintage Books, 1973.

Naisbitt, John. *Megatrends.* New York: Warner Books, 1984.

Software Documentation:

*Wheeler, Fay (Bank Street School of Education). *Teacher's Guide, Bank Street School Filer.* Pleasantville, NY: Sunburst Communications, 1986.

Articles, Reviews, and Technical Reports

Badgett, Tom. "Search Software: Directory Assistance." *PC Magazine* 6.9 (May 12, 1987): 263-273.

Badgett, Tom. "Tapping Into On-Line Knowledge." *PC Magazine* 6.9 (May 12, 1987): 263-273.

"DBKIDS Newsletter." Amissville, VA: Targeted Learning Corporation (Jan. 1985, Spring 1986).

Dunfey, Joan. "Using a Database in an English Classroom." *The Computing Teacher* (Nov. 1984): 26-30.

"Early Grades Ideas: Creating a Database for Classroom Use." *Classroom Computer Learning* 5.7 (Mar. 1985): 50-51.

"Educator's Guide to Dow Jones News/Retrieval." (Feb. 1986): Contact Hal Logan, Ass't Director for Business Development, Dow Jones Information Service, P.O. Box 300, Princeton, NJ, 08540.

Edwards, Carol. "African-American Scientists and Inventors." *Teaching and Computers* 4.5 (Feb. 1987): 10-17.

Elmer-DeWitt, Philip. "An Electronic Assault on Privacy?" *Time* (May 19, 1986): 104. *This is an example of an article on databases which students could be assigned to clip from popular magazines and newspapers.*

*Emberly, Jack. "A Tutorial Database." *InCider* (Feb. 1988): 31-34.

*These articles specifically address the *Bank Street School Filer* and databases.

Estes, Mark. *Software Reviews on File.* Facts on File, Inc., 460 Park Ave. So., New York, NY 10016, (July 1986).

Field, Cynthia E. "What Do These People Have in Common?" *inCider* (Nov. 1986): 84-91.

Ford, Marilyn Sue, and Gregg, Linda. "The Rockhound Files." *Teaching and Computers* 4.6 (Mar. 1987): 10-15.

Greengrass, Linda. "Creating a Database with Children." *Library Computing* (May 1985): 143-146.

Hannah, Larry. "Teaching Data Base Search Strategies." *The Computing Teacher* (June 1987): 16-23.

Honeyman, David S. "Data Bases and Special Education IEP Reports." *Electronic Learning* (Mar. 1985): 24, 26.

Hunter, Beverly. "American Indian Data File." *Teaching and Computers* 3.3 (Nov./Dec. 1985): 10-15.

Hunter, Beverly. "Knowledge-Creative Learning with Data Bases." *Social Education* (Jan. 1987): 38-43.

Jukes, Ian. "Data Base Across the Curriculum: Integrating Tomorrow's Technology into Today's Classroom." Presented at *Impact* '87. Dept. of Educational Computing, Box 2703, Whitehorse, YT, Y1A 2C6, Canada, 1987.

*Kasper, Elizabeth. "Bank Street School Filer." *Info* (May-June 1988): 61-62.

Krueger, Shirley. "Brontosaurus Meets the Computer." *The Computing Teacher* (June 1987): 13-15.

Lowd, Beth. "Guest Editorial: The 'Right Ways' to Use Computers." *The Computing Teacher* (Oct. 1986): 4.

McLeod, Richard, and Hunter, Beverly. "The Data Base in the Laboratory." *Science and Children* 24.4 (Jan. 1987): 28-30, 155.

Newman, Judith M. "OnLine: Using a Database in the Classroom." *Language Arts* 63.3 (March 1986): 315-19.

*Olds, Henry F., and Dickenson, Anne. "Move Over, Word Processors--Here Come the Databases." *Classroom Computer Learning* 6.2 (Oct. 1985): 46-49.

Parker, Janet. "Tools for Thought." *The Computing Teacher* (Oct. 1986): 21-23.

*Pon, Cathy. "Software Reviews: Bank Street School Filer." *The Computing Teacher* (March 1987): 36-38.

*These articles specifically address the *Bank Street School Filer* and databases.

Pon, Cathy. "Databasing in the Elementary (and Secondary) Classroom." *The Computing Teacher* 12.3 (Nov. 1984): 28-30.

Ross-McBride, Gail, and Glistbal, Jackie. "World-Wide Travel, Inc.: Using a Data Base to Set Up Your Own Classroom Travel Agency." *Teaching and Computers* (May/June 1986): 38-43.

Scrogan, Len. "What's New in Online Information Services." *Classroom Computer Learning* 7.7 (Apr. 1987): 48-51.

Swett, Sheila. "All-American Data Files." *Teaching and Computers* 2.8 (May/June 1985): 18-21.

Urschell, William. "Data Base/Filer Software." *Personal Computing* (Apr. 1985): 203.

"Upper Grades Ideas: Use of Databases in History Classes." *Classroom Computer Learning* 5.6 (Feb. 1985): 66-67.

Weaver, Dave. "Database Software for Social Studies." *A MicroSift Quarterly Report*. Portland, Oregon. Northwest Regional Educational Laboratory. (May 1986).

*Wheeler, Fay. "The New Ready-Made Databases: What They Offer Your Classroom." *Classroom Computer Learning* 7.6 (Mar. 1987): 28-32.

Woldman, Evelyn, and Kalowski, Phyllis. "Make Your Own Dinosaur Data Base." Teaching and Computers (Feb. 1985): 14-17.

"Worlds of Information: Three Activity Worksheets That Show Students How to Use a Data Base to Access Information of Global Proportions." *Teaching and Computers*. (Sept. 1986): 13-18.

*These articles specifically address the *Bank Street School Filer* and databases.

RESOURCES

Database program: *Bank Street School Filer*
Published by Sunburst Communications

Databases available for use with the *Bank Street School Filer:*

Animal Life
Astronomy
Climate and Weather
Endangered Species
North America
Colonial Times
Space
United States

Available for: Apple II family (64K and 128K)
Commodore 64 and 128

Published by Sunburst Communications

Sunburst Videotape, *Using Databases in the Classroom*
Available free for 30 days in VHS and Beta versions.
Teachers are encouraged to make all the copies they wish during the 30 day period.

Sunburst Address:

Sunburst Communications, Inc.
101 Castleton Street
Pleasantville, NY 10570

Sunburst Phone Numbers

Call toll-free (800) 338-3457
Or call collect (914) 747-3310

BANK STREET SCHOOL FILER
WORKSHOP EVALUATION

Please complete this evaluation and put it in the large envelope provided by the presenter. THANK YOU!

1. What parts of the course did you find stimulating and/or useful?

2. What else would you have wanted?

3. General comments: (organization of workshop, presentation, quality of software)

ENTERING YOUR CLASS RECORD

- Type in the information.
- Press **RETURN** after each entry.
- Press ⌘**-RETURN** when done.

To correct an error:

- **DELETE** key—erases information left of cursor.
- ↓, ↑ keys—move you to other entries.

Notes:

Birthday: 11/7

Do not include year of birth. Use form above.

Home Phone #: 7185963255

Include area code. Don't type parentheses, dashes or spaces.

State Born In: New York

Write out name of state you were born in.

ENTERING YOUR CLASS RECORD

- Type in the information.
- Press **RETURN** after each entry.
- Press **C=-RETURN** when done.

To correct an error:

- **DELETE** key—erases information left of cursor.
- ↓, ↑ keys—move you to other entrys.

Notes:

Birthday: 11/7

Do not include year of birth. Use form above.

Home Phone #: 7185963255

Include area code. Don't type parentheses, dashes or spaces.

State Born In: New York

Write out name of state you were born in.

WORKSHOP GOALS

- To learn how to use a database program, the *Bank Street School Filer.*
- To investigate how to introduce students to databases.
- To become skilled in evaluating databases.
- To discover ways of integrating databases within curriculum.
- To explore how to use databases to encourage development of inquiry skills.

AGENDA

9:00 LOG-IN

9:15 INTRODUCTIONS

9:30 WHAT IS A DATABASE?
Demo
Lab

10:30 BREAK

10:45 USING PREPARED DATABASES
Demo
Lab

12:00 PRINTING REPORTS

12:30 VIDEOTAPE

1:00 LUNCH

1:45 CREATING YOUR OWN DATABASE
Demo
Lab

3:25 CLASSROOM CONSIDERATIONS

3:50 CONCLUSIONS

WHAT IS A DATABASE?

- an organized collection of information

- examples:

  recipe cards
  dictionary
  address book

Name some other examples:

_____

_____

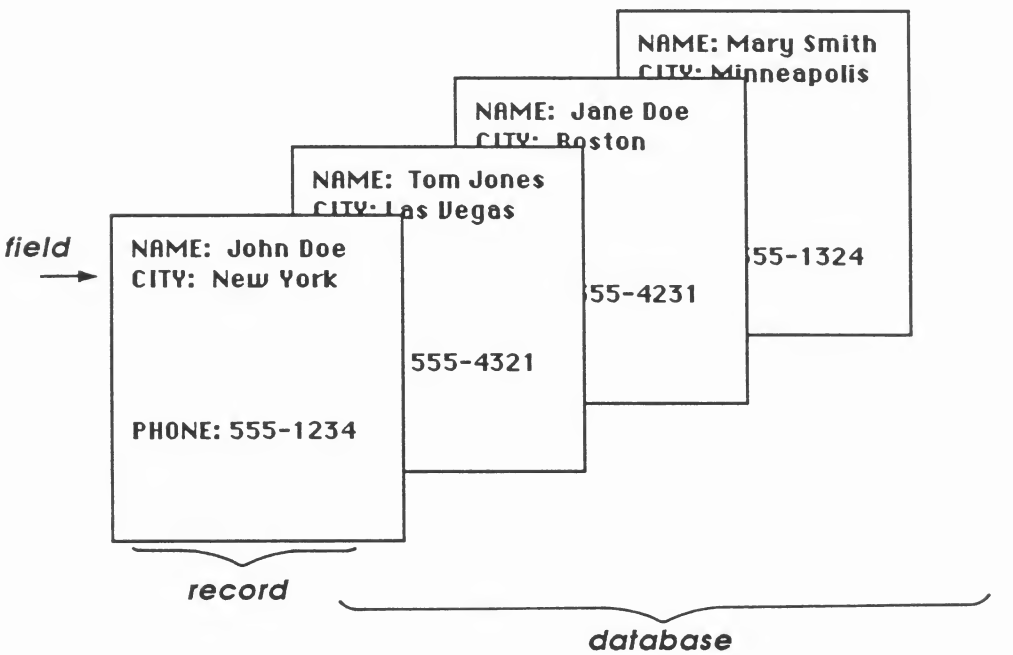
_____

_____

COMPONENTS OF A DATABASE

A database is made up of **records.**
A record contains a complete set of data.

Each category of information is called a **field.**



CREATING A NEW FIELD

To create a new field:

1. Select **CREATE FIELD**.

2. Select a field type.

3. Type in the name of the new field.

4. Position the field.

BROWSING

BROWSING is like flipping through the pages of a book.

How to use:

- To access press ESC from main menu.
- ⌘ - →, ← to move through records.

How to edit:

- ↓, ↑ keys move you to the field you want to change.
- You destroy old entry when you begin typing.
  To retrieve old entry press ESC.
- →, ← keys move you within a field. Insert characters by typing.
- DELETE erases to the left.

BROWSING

BROWSING is like flipping through the pages of a book.

How to use:

- To access press ⏎ from main menu.
- C= - →,← to move through records.

How to edit:

- ↓, ↑ keys move you to field you want to change.
- You destroy old entry when you begin typing. To retrieve old entry press ⏎.
- →, ← keys move you within a field. Insert characters by typing.
- DELETE erases to the left.

FINDING

FINDING is asking for a particular record or set of records.

How to use:

- To access highlight **FIND** from the main menu and press RETURN.

- To **FIND** you create a selection sentence.

  — Choices in the selection boxes differ depending on the data type.

  — You can create two- , three- , or four-part selection sentences using connectors AND or OR.

- You can edit while in **FIND**.

SORTING

SORTING changes the order of records according to criteria you specify.

How to use:

- To access highlight **SORT** from the main menu and press RETURN.

- To **SORT** you must create a selection sentence.

  — Choices in the selection boxes differ depending on the data type.

  — You can use a two-part selection sentence in order to **SORT** by two criteria.

- When done, press ESC to **BROWSE** and check the sort order.

SORTING

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How to use:

- To access highlight **SORT** from the main menu and press RETURN.

- To **SORT** you must create a selection sentence.

  — Choices in the selection boxes differ depending on the data type.

  — You can use a two-part selection sentence in order to **SORT** by two criteria.

- When done, press ⏎ to **BROWSE** and check the sort order.

SUMMARY OF BASIC OPERATIONS

BROWSE

- BROWSING is like flipping through the pages of a book.
- Press ESC from the main menu to **BROWSE**.
- ⌘ - →, ← to move through the records.
- You can edit while in **BROWSE**.

FIND

- FINDING is asking for a particular record or set of records.
- To access highlight **FIND** from the main menu and press RETURN.
- You create a one- , two- , three- , or four-part selection sentence.

SORT

- SORTING is changing the order of records.
- To access highlight **SORT** from the main menu and press RETURN.
- You create a one- or two-part selection sentence.
- Press ESC to **BROWSE** after each sort.

SUMMARY OF BASIC OPERATIONS

BROWSE

- BROWSING is like flipping through the pages of a book.
- Press ⏎ from the main menu to **BROWSE**.
- C= - →, ← to move through the records.
- You can edit while in **BROWSE**.

FIND

- FINDING is asking for a particular record or set of records.
- To access highlight **FIND** from the main menu and press RETURN.
- You create a one- , two- , three- , or four-part selection sentence.

SORT

- SORTING is changing the order of records.
- To access highlight **SORT** from the main menu and press RETURN.
- You create a one- or two-part selection sentence.
- Press ⏎ to **BROWSE** after each sort.

REGION ABBREVIATIONS

NE = Northeast

SE = Southeast

MW = Midwest

SW = Southwest

RM = Rocky Mountain

PC = Pacific Coast

CREATING A COMPUTED FIELD

1. Select **CREATE FIELD.**

2. Select COMPUTED as the field type.

3. Create a definition sentence.

4. Name the field.

5. Position the field.

DENSITY OF STATES BY REGION

Region	State	Density	Largest City	Land(Sq.miles)
MW	South Dakota	9.094	Sioux Falls	75,955
	North Dakota	9.422	Fargo	69,273
	Nebraska	20.525	Omaha	76,483
	Kansas	28.900	Wichita	81,787
	Minnesota	51.407	Minneapolis	79,289
	Iowa	52.087	Des Moines	55,941
	Missouri	71.261	St. Louis	68,995
	Wisconsin	86.401	Milwaukee	54,464
	Indiana	152.096	Indianapolis	36,097
	Michigan	163.016	Detroit	56,817
	Illinois	204.967	Chicago	55,748
	Ohio	263.518	Cleveland	40,975
==========SUBAVERAGES=========		92.725	12 RECORDS==========	62,652
NE	Maine	36.373	Portland	30,920
	Vermont	55.191	Burlington	9,267
	New Hampshire	101.984	Manchester	9,027
	Pennsylvania	263.841	Philadelphia	44,966
	Delaware	299.868	Wilmington	1,982
	New York	367.086	New York	47,831
	Maryland	426.345	Baltimore	9,891
	Connecticut	639.156	Bridgeport	4,862
	Massachusetts	733.074	Boston	7,826
	Rhode Island	902.911	Providence	1,049
	New Jersey	979.235	Newark	7,521
==========SUBAVERAGES=========		436.824	11 RECORDS==========	15,922
PC	Alaska	.705	Anchorage	569,600
	Oregon	27.376	Portland	96,184
	Washington	62.072	Seattle	66,570
	Hawaii	150.146	Honolulu	6,425
	California	151.367	Los Angeles	156,361
==========SUBAVERAGES=========		78.333	5 RECORDS==========	179,028

Region	State	Density	Largest City	Land(Sq.miles)
RM	Wyoming	4.831	Casper	97,203
	Montana	5.404	Billings	145,587
	Nevada	7.285	Las Vegas	109,889
	Idaho	11.417	Boise	82,677
	Utah	17.797	Salt Lake City	82,096
	Colorado	27.851	Denver	103,766
==========SUBAVERAGES=======6 RECORDS==========				
		12.431		103,536.33
SE	Arkansas	44.016	Little Rock	51,945
	Mississippi	53.295	Jackson	47,296
	Alabama	76.790	Birmingham	50,708
	West Virginia	80.999	Charleston	24,070
	Kentucky	92.327	Louisville	39,650
	Louisiana	93.610	New Orleans	44,930
	Georgia	94.073	Atlanta	58,073
	South Carolina	103.286	Columbia	30,225
	Tennessee	111.090	Memphis	41,328
	North Carolina	120.533	Charlotte	48,798
	Virginia	134.410	Norfolk	39,780
	Florida	180.187	Jacksonville	54,090
==========SUBAVERAGES=========12 RECORDS==========				
		98.718		44,241.08
SW	New Mexico	10.731	Albuquerque	121,412
	Arizona	23.967	Phoenix	113,417
	Oklahoma	43.984	Oklahoma City	68,782
	Texas	54.282	Houston	262,134
==========SUBAVERAGES==========4 RECORDS==========				
		33.241		141,436.25
==========AVERAGES==========50 RECORDS==========				
		154.032		70,799.24

THE COMMENT FIELD

The COMMENT field is like a little notecard attached to each record.

How to use:

- ⌘-C turns it on or off.
- It renames the field to better describe the data it contains.

About the field:

- It holds seven lines of free-form text.
- It may not be deleted from a database structure. However, you can erase the contents.

THE COMMENT FIELD

The COMMENT field is like a little notecard attached to each record.

How to use:

- C=-C turns it on or off.
- It renames the field to better describe the data it contains.

About the field:

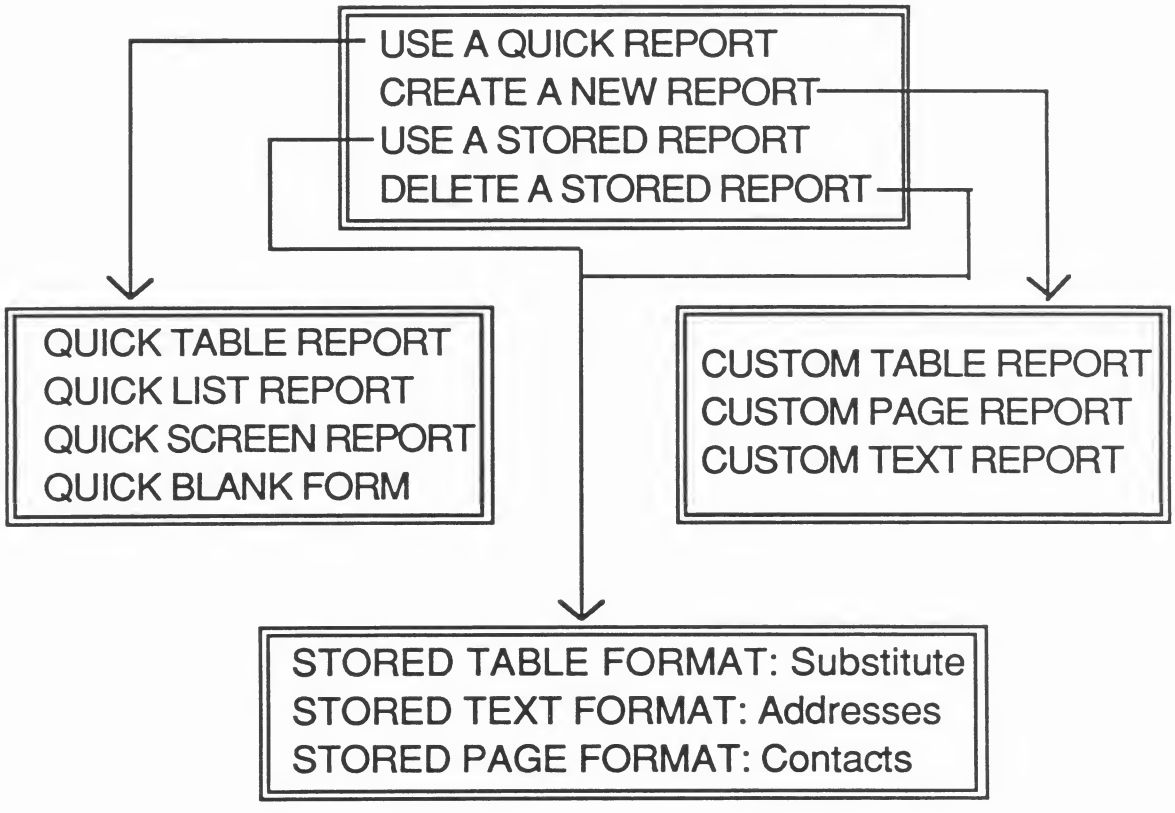
- It holds seven lines of free-form text.
- It may not be deleted from a database structure. However, you can erase the contents.

THINKING SKILLS

- Information retrieval
- Recognizing patterns and trends
- Analyzing relationships
- Testing hypotheses
- Interpreting the data
- Thinking critically

REPORTS OVERVIEW

Highlight REPORT in the menu and press RETURN.



QUICK TABLE REPORT

First	Last	Sex	Birthday	Bus	Home Phone
Lisa	Edgin	F	November 13, 1977	16	(617) 343-9434
Richard	Giroux	M	June 12, 1978	0	(617) 444-3215
Ryan	Harnden	M	July 2, 1978	0	(617) 454-9458
Stephen	Melville	M	April 16, 1978	0	(617) 994-8545
Brian	Orshak	M	May 2, 1978	25	(617) 373-9393
Caprice	Parmenter	F	March 24, 1977	32	(617) 445-3434
Robert	Rigney	M	April 24, 1977	44	(617) 333-9393
Kelli-Jo	Rodriguez	F	April 15, 1978	32	(617) 837-4834
Susan	Savonen	F	May 2, 1977	44	(617) 839-4853
Elizabeth	Tibbett	F	May 6, 1977	0	(617) 282-8282
Michelle	Tingley	F	May 23, 1978	16	(617) 873-8383

QUICK LIST REPORT

First:	Lisa
Last:	Edgin
Birthday:	November 13, 1977
Bus:	16
Home Phone:	(617) 343-9434
Street:	35 Wellington St.
City:	Marshfield
State:	MA
Zip:	10125
Allergies:	
Contact 1:	Melissa Kent-Edgin
Relation 1:	mother
Home Phone 1:	
Work Phone 1:	(617) 384-7433
Contact 2:	James
Relation 2:	father
Home Phone 2:	
Work Phone 2:	(518) 384-7343
COMMENT:	Lisa gets a ride home with Stephen Melville on Tuesdays and Thursdays.

QUICK SCREEN REPORT

First: Lisa **Last:** Edgin
Sex: F **Birthday:** November 13, 1977
Bus: 16
Home Phone: (617) 343-9434
Allergies:

Contact 1: Melissa Kent-Edgin
Relation 1: mother
Home Phone 1: **Work Phone 1:** (617) 383-7433

Contact 2: James
Relation 2: father
Home Phone 2: **Work Phone 2:** (518) 384-7343

Street: 35 Wellington St.
City: Marshfield **State:** MA
Zip: 10125

COMMENT:
Lisa gets a ride home with Stephen Melville on Tuesdays and Thursdays.

QUICK BLANK FORM

First: **Last:**
Sex: **Birthday:**
Bus:
Home Phone:
Allergies:

Contact 1:
Relation 1:
Home Phone 1: **Work Phone 1:**

Contact 2:
Relation 2:
Home Phone 2: **Work Phone 2:**

Street:
City: **State:**
Zip:

COMMENT:

PRINTING A QUICK LIST REPORT

1. Select **USE A QUICK REPORT**.

2. Select **QUICK LIST REPORT.**

3. Press RETURN to print all records.

4. Choose N to reject the current sort sentence and create a new one.
   - **SORT** file by **Last** field alphabetically a to z.

5. Choose Y to review format questions.
   - Change "Print comments" to Yes and press ⌘-RETURN.

6. Press RETURN again.

7. Type in a title and press RETURN.

8. Press S to send report to screen.

9. After first page has scrolled by, press SPACEBAR to stop report.

PRINTING A QUICK LIST REPORT

1. Select **USE A QUICK REPORT**.

2. Select **QUICK LIST REPORT.**

3. Press RETURN to print all records.

4. Choose N to reject current sort sentence and create a new one.
   - **SORT** file by **Last** field alphabetically a to z.

5. Choose Y to review format questions.
   - Change "Print comments" to Yes and press C=-RETURN.

6. Press RETURN again.

7. Type in a title and press RETURN.

8. Press S to send report to screen.

9. After first page has scrolled by, press SPACEBAR to stop report.

CUSTOM TABLE REPORT

Fay Wheeler's Class, Room 203

First	Last	Bus	Home Phone	Allergies	Birthday
Lisa	Edgin	16	(617) 343-9434		11/13/77
Richard	Giroux	0	(617) 444-3215		6/12/78
Ryan	Harnden	0	(617) 454-9458		7/2/78
Stephen	Melville	0	(617) 994-8545	wheat flour	4/16/78
Brian	Orshak	25	(617) 373-9393	milk products	5/2/78
Caprice	Parmenter	32	(617) 445-3434		3/24/77
Robert	Rigney	44	(617) 333-9393		4/24/77
Kelli-Jo	Rodriguez	32	(617) 837-4834		4/15/78
Susan	Savonen	44	(617) 839-4853	penicillin	5/2/77
Elizabeth	Tibbett	0	(617) 282-8282		5/6/77
Michelle	Tingley	16	(617) 873-8383	aspirin, chocolate	5/23/78

CUSTOM PAGE REPORT

Contacts

Last: Edgin **First:** Lisa **Home Phone:** (617) 343-9434

Contact 1: Melissa Kent-Edgin
Relation 1: mother
Home Phone 1: **Work Phone 1:** (617) 383-7433

Contact 2: James
Relation 2: father
Home Phone 2: **Work Phone 2:** (518) 384-7343

Last: Giroux **First:** Richard **Home Phone:** (617) 444-3215

Contact 1: Gail Gardner
Relation 1: mother
Home Phone 1: **Work Phone 1:** (617) 322-4983

Contact 2: James
Relation 2: father
Home Phone 2: **Work Phone 2:** (617) 444-9393

Last: Harnden **First:** Ryan **Home Phone:** (617) 454-9458

Contact 1: Jennifer
Relation 1: mother
Home Phone 1: **Work Phone 1:** (512) 444-8484

Contact 2: Gary
Relation 2: father
Home Phone 2: **Work Phone 2:**

Last: Melville **First:** Stephen **Home Phone:** (617) 994-8545

Contact 1: Jody Steiner
Relation 1: mother
Home Phone 1: **Work Phone 1:** (617) 394-8854

Contact 2: James Melville
Relation 2: father
Home Phone 2: (617) 393-8433 **Work Phone 2:** (617) 228-3984

CUSTOM TEXT REPORT

Parents or Guardian of:
Elizabeth Tibbett
44 West Elm St.
Marshfield, MA 10124

Parents or Guardian of:
Richard Giroux
458 Blackburn Lane
Marshfield, MA 10125

Parents or Guardian of:
Ryan Harnden
366 West Cherry Rd.
Marshfield, MA 10125

Parents or Guardian of:
Stephen Melville
88 Main St. Apt. 5
Marshfield, MA 10125

Parents or Guardian of:
Brian Orshak
22 West Elm St.
Marshfield, MA 10125

Parents or Guardian of:
Michelle Tingley
26 Clinton St.
Marshfield, MA 10125

Parents or Guardian of:
Robert Rigney
55 Grant Avenue
Marshfield, MA 10125

Parents or Guardian of:
Kelli-Jo Rodriguez
24 Murphey Rd.
Marshfield, MA 10125

REPORT PLANNING SHEET

1. Put a check next to the type of report you want.

   _____ QUICK SCREEN REPORT (prints whatever is on screen)

   _____ QUICK LIST REPORT (prints whatever is on screen, but lines up the fields)

   _____ QUICK TABLE REPORT (prints a table using as many fields as will fit across the page)

   _____ CUSTOM TABLE REPORT (prints a table, but lets you choose which fields to print)

   _____ CUSTOM PAGE REPORT (prints the screen, but lets you choose which fields to use and where to put them)

   _____ CUSTOM TEXT REPORT (lets you use information in your fields together with words, underlines, carriage returns)

2. Do you want to print all of the records in the file? If not, which records do you want?_____

3. Do you want to print the records in their current browse order? If not:

   What field do you want to sort by?_____
   When the information in that field is the same, which field do you want to sort by?_____

4. Do you want to change any of the format options? _____

   _____

5. What heading do you want on the report?_____

6. For CUSTOM REPORTS only: Do you want to save the report format with your file? If yes, what name do you want to give it?
   _____ *(maximum 10 characters)*

PRINTING A CUSTOM TABLE REPORT

1. Select **CREATE A NEW REPORT.**

2. Select CUSTOM TABLE REPORT.

3. Choose N to print just a few records.
   - Create a selection sentence.

4. Choose N to **SORT** records.
   - Create a **SORT** sentence.

5. Choose Y to review format questions

6. Select fields for your report.

7. Type in title.

8. Choose Y to store report format.
   - Type in a name for the stored report format.
   - Choose Y to confirm.

9. Choose S to send report to screen.

FORMAT RANGES

All Reports

Print width:	65	(38 - 128)
Left margin:	8	(0 - 20)
Top margin:	6	(0 - 20)
Bottom margin:	9	(0 - 20)
Page length:	66	(6 - 112)
Pause each page:	No	(Yes)
Page #'s:	Bottom	(Top, None)
First page #:	1	(1 - 255)
File name/count:	No	(Yes)
Title:	Center	(Left, Right)
Skip space as sort field changes:	None	(Line, Page)
Time:	12:00 AM	(24:00)
Number:	1,000	(1000)
Date:	Month dd, yyyy	(mm/dd/yy; MON dd, yyy; and others)
Money:	$1,000.00	(with or without comma, $, or cents)

Table Reports

Line spacing:	1	(1 - 3)
Record numbers:	No	(Yes)
Averages:	None	(Sub and Grand, Grand only)
Totals:	None	(Sub and Grand, Grand only)
Repeat data within sorted field:	Yes	(No)

NOTE: There are further listings for List, Screen, Page, and Text reports.

DATABASE IDEAS

HOBBIES: stamps, baseball cards, coins, comics

YOUR JOB: newspaper customers, girl scout cookies sold

OPINION SURVEY: capital punishment, smoking, abortion, favorite TV shows, cars

DICTIONARY: local slang, vocabulary/spelling words

SPORTS: Olympic gold winners, sports team rosters

INTERESTS: whales, planets, Greek Gods

MUSIC: rock groups, record collection, music reviews

SCHOOL: software collection, club members or records, book reviews

COMMUNITY: volunteer opportunities, babysitters, endangered species

Can you list some others?

Topic	*Each Record*	*Likely Fields*

CRITERIA IN SELECTING A TOPIC

- Purpose of the database?
  Does it answer some need?

- Are there interesting relationships that might be observed by sorting or finding?

- Are there useful reports that could be designed?

- Will you be able to take advantage of the *School Filer* 's special capabilities (such as COMPUTED field, the COMMENT field, and ability to create CUSTOM TABLE REPORTS)?

- Will you have enough room to cover topic adequately? (Or, will meaning be lost by trying to squeeze it into a database?)

- If the topic does not fit, is there a way to limit its scope or break it into two parts?

- Do I have the resources and time to locate the information I need?

DATABASE PLANNING SHEET

My topic is_____.

I will save my file using the name _____.
(8 characters or less)

Each record will describe one _____.

I will need approximately _____ records.

	Field Name (15 characters)	*Type* *	*Description*
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____

The COMMENT field will be named:_____

It will contain:_____

*Field types: ANYTHING (A), NUMBER (#), MONEY ($), DATE (D), ZIP (Z), PHONE (P), TIME(T), COMPUTED (C)

SUMMARY

To create your own database:

1. Select topic.
2. What will each record describe?
3. How many records needed?
4. What fields do I need?
5. COMMENT field?
6. Select **CREATE FIELD** and begin creating database.
7. Reposition fields as necessary.
8. Enter records.
9. Save.

UTILITY PROGRAM

1. CHANGE SETUP ITEMS
2. CHANGE REPORT FORMAT ITEMS
3. DEFINE PRINTER COMMANDS
4. CHANGE SERIAL PRINTER

Q. QUIT UTILITY

UTILITY PROGRAM

1. CHANGE SETUP ITEMS
2. CHANGE REPORT FORMAT ITEMS
3. DEFINE PRINTER COMMANDS
4. SETUP FOR RS-232 INTERFACE

Q. QUIT UTILITY

CLASSROOM TOOLS DISK

PRINT FILER REPORTS

COPY FILES

RENAME FILES

DELETE FILES

INITIALIZE DISKS

CATALOG DISKS

CHANGE SETTINGS

QUIT PROGRAM

CLASSROOM TOOLS DISK

PRINT FILER REPORTS

COPY FILES

RENAME FILES

DELETE FILES

PREPARE DISKS

CATALOG DISKS

CHANGE SETTINGS

QUIT PROGRAM

SUMMARY

- Creating a database is a problem-solving activity. Skills include:

  a. defining the problem (determining the topic)
  b. breaking it into meaningful parts (records)
  c. brainstorming (questions or fields)
  d. labeling (field names)
  e. predicting (responses)
  f. categorizing and classifying (acceptable responses)
  g. prioritizing and ordering (fields)
  h. checking for accuracy (of data)
  i. testing, evaluating and revising (the database design)

- Analyzing a database involves many higher-level thinking skills. For example:

  a. generating hypotheses
  b. asking questions
  c. noting commonalities and differences
  d. spotting trends
  e. discovering relationships
  f. making inferences/forming generalizations
  g. thinking critically (identifying assumptions and points of view, questioning reliability of data, distinguishing relevant from irrelevant)
  h. drawing conclusions

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Title

School or Business Name

Address

City State Zip

Grade Span of School

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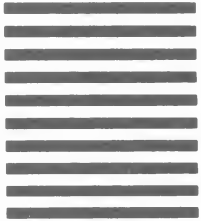

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